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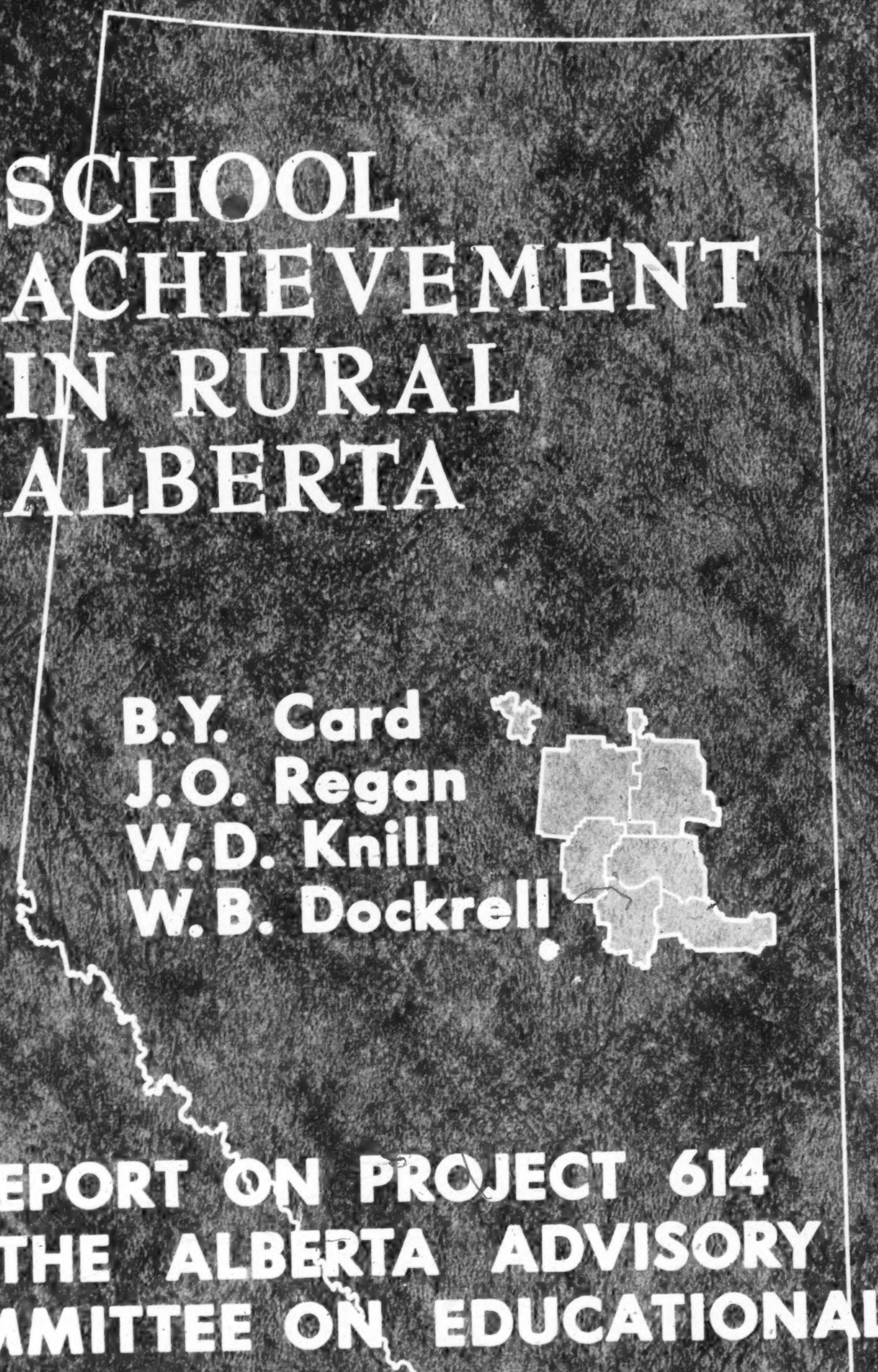
To increase teacher participation in teachers' conventions and to close the gap between the theorist and the practitioner, the Alberta Teachers Association in 1964 initiated a study concerned with teacher and parent perception of sociological factors affecting the learning process in the classroom. This monograph includes the original study and 5 resultant studies: (1) Professional Teachers' Perceptions of Social Factors; (2) Sampling and Research Procedures used with Pupils; (3) Motivation for Learning; (4) Language and Learning; and (5) The Social Climate for Learning. An appendix contains a summary of findings from the pupil surveys conducted during the original study. (DK)



SCHOOL ACHIEVEMENT IN RURAL ALBERTA

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A REPORT ON PROJECT 614 OF THE ALBERTA ADVISORY COMMITTEE ON EDUCATIONAL RESEARCH

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SCHOOL ACHIEVEMENT IN RURAL ALBERTA

An Exploratory Study of Social and Psychological Factors Associated With Grade IX Pupil Achievement in North-Eastern Alberta

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A Report on Project 614 (1964-65)
of the
Alberta Advisory Committee
on
Educational Research

prepared for

The First Edmonton District
of the
Alberta Teachers' Association

May, 1966

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PREFACE

This monograph is an attempt to extend in time and space a rather unique experience in interdisciplincary research and communication. The introduction by John Verney describes the situation in which the project took form. The remainder of the monograph deals with various research efforts. Teachers were involved in considering social factors influencing learning in their classrooms, schools and communities. Pupils were surveyed to ascertain motivations, attitudes and patterns of social interaction. Home interviews disclosed language and social backgrounds, and the attitudes and aspirations of parents.

All of these studies were done in North-eastern Alberta, where the pioneer generation which opened the area as homesteaders is being replaced by a third and fourth generation which is adapting to numerous changes and strains in local communities and in the larger Alberta society. The studies are exploratory in the sense that they open up areas of inquiry which education in Rural Alberta can scarcely ignore.

The research, planning and conferences which went into the various projects reported here are like the submerged part of an iceberg. This monograph is like the part above the surface. Our indebtedness is therefore great to many colleagues: to Professors S. Hunka, C. A. S. Hynam, C. W. Hobart, M. Jenkinson, R. E. Eick, and others; to senior and graduate students, particularly D. Knowles and L. Njaa; to field workers, especially Mr. and Mrs. Peter Kirylchuk; to the graduate students and professors who served as convention consultants; to the teachers and their executive of the First Edmonton District of the Alberta Teachers' Association; to the superintendents of schools and the school boards in this area. We recognize with appreciation the funds provided by the teachers, school boards and the Alberta Advisory Committee on Educational Research. We are also indebted to the Alberta Teachers' Association for their encouragement, and for permission to reprint John Verney's article from the A.T.A. Magazine.

Edmonton, Alberta
May, 1966

BYC
WBD
WDK
JOR

INTRODUCTION

A NEW LOOK AT TEACHERS' CONVENTIONS

John Verney

For many years teachers' conventions have been so much an integral part of the educational scene in Alberta, that recently there has been a marked tendency to take them for granted. This has been exemplified by a falling off of interest and a passive attitude toward the various types of presentation that are characteristic of many convention programs.

The Association's Guidebook for Teachers' Conventions states:

> Conventions should be designed to inspire teachers, to help them keep their perspective on how they fit into the general educational scene, and to keep them up to date on matters of general concern and interest to all teachers.

If these are the true objectives of teachers' conventions, then we have been singularly ineffective in achieving them. Teachers have not been coming away from their annual convention inspired, neither have they been getting a clear picture of how they fitted into the educational scene. They have dutifully sat through speeches, some of which were far longer than they ought to have been; they have dourly tolerated group sessions in which they were able to take very little part; and they have heaved a great sigh of relief when it was all over.

Until 1963 conventions of the First Edmonton Convention District had been doggedly following the traditional pattern. Finally the planning committee lost patience and decided to try to do something that might lead to achieving the objectives laid down in the guidebook. An analysis of teacher opinion revealed that disinterest was resulting from an ever-widening gap between educational theorists and class teachers. Convention presentations by theorists had little meaning in the context of a rural classroom, and group sessions attended by 150 or so teachers provided little opportunity for the interchange of ideas. In short, conventions had often been one-way streets, the theorists had done all the talking and the teachers had done all the listening. How to restore two-way traffic was the problem that convention planning delegates took back to their respective locals in the hope that some helpful suggestions might be forthcoming.

When this problem was put before an annual meeting of my own local, dissatisfaction at previous conventions was apparent. So marked was it that some members even suggested instituting a small convention, probably on a local basis, where there would be more chance of an interchange of ideas between theorists and teachers. In the end, it was decided that, if planning began at the local level, this desired interchange of ideas might still be obtainable in the large convention. With this end in view, a convention planning advisory committee, consisting of the executive of the local plus one representative from each school in the system, was set up.

This committee was successful beyond all expectations. Its first meeting, held after members had had a week or so to talk matters over at school level, provided many valuable suggestions, the most important of which was that the underlying motif of conventions attended by rural teachers should be recognition that rural schools have many problems and weaknesses which are unique. This general statement contains the germ which grew into the new concept of teachers' conventions developed by the First Edmonton District.

After this meeting the locals' delegates to the planning committee of the First Edmonton Convention District were able to prepare a brief outlining a proposed form for the next convention to be held in November, 1964. The brief was based on five criteria: (1) The teachers must be actively involved in the proceedings of the convention at as many points as possible. (2) University staff must be actually involved in the convention from the planning stage on. (3) The presentations of all convention speakers must be keyed to the convention pattern. (4) Group sessions must be small enough to permit group dynamics to operate. (5) Provision must be made for theorists and teachers to meet on equal footing.

Other locals in the convention district had obviously been thinking along similar lines because the brief was readily accepted as a working blueprint.

Because of the consensus that university personnel should be involved from the very beginning of the planning, the next meeting included Dr. B. Y. Card of the Department of Educational Foundations of the University of Alberta, Edmonton, and Dr. W. H. Worth, chairman of the Department of Elementary Education. Neil Purvis of the Department of Education and ATA Executive Assistant M. T. Sillito were also present at the meeting where the brief was discussed and the form of the forthcoming convention began to take shape.

It was apparent from the first that the university representatives were just as concerned as the teachers over the widening gap between theorists and practitioners and wished to do something about it. The breakthrough which led to the bridging of this gap must be attributed to Dr. Card, who proposed that a research study carried out jointly by the teachers and the University of Alberta would go a long way towards meeting the needs of the convention district.

The study, to become known as Project 614, consisted of a sociological study of the area included in this convention district. The two clearly defined aspects of the study were the teachers' views of what sociological factors were affecting children in school, and the parents' views of what sociological factors were affecting their children.

The convention was to consist of any appraisal of the findings of the study and an attempt to bring about a new awareness of the sociological problems existing in the area of the convention district. To say that the cooperation of the University of Alberta was enthusiastic is an understatement. Dr. Card, his colleagues and the graduate students who assisted must have put in hours of work. The Alberta Advisory Committee on Educational Research was no less enthusiastic, as it contributed $1,000 towards the cost of the study and made it all possible.

In June of 1964 all the teachers of the First Edmonton Convention District received a questionnaire in which they were asked to evaluate the influence that certain sociological factors had on students in their charge. During the summer months university personnel treated these questionnaires statistically and summarized the results. In September, the second part of the study was carried out. This consisted of taking a sampling of Grade IX students from the area and interviewing their parents. The interviews provided an assessment of the sociological factors that parents thought were affecting their children's performance in school. The results once again were treated statistically and summarized. The raw material for the

1964 convention of the First Edmonton District was ready. The remaining problem was how to present it so that the teachers were actively involved.

It was essential that teachers come to the convention prepared for what was to take place, and in order to achieve this objective two releases of preliminary findings were sent out. The first provided a statistical description of the area and included such things as the nature of the population by ethnic and religious groups as well as trends in population movement. The second contained the statistical summarization of the questionnaire completed by the teachers in June.

If the teachers were to be able to make use of this information it was necessary that the total structure of the convention allow for discussion of the evidence with the university personnel who had prepared it, and the final meeting of the planning committee dealt with this matter.

The program that evolved was to open with a descriptive presentation of the statistical evidence from both the teacher questionnaire and the parent interviews. This was to be followed by group sessions in which it was hoped teachers would discuss the findings of the study among themselves and with university consultants. In order to ensure discussion it was essential that groups be kept small. This was achieved by setting up 33 groups, each containing about 16 teachers and one or two consultants. Teachers were assigned randomly to groups and the consultants were allocated by the University of Alberta. It had been anticipated that there would be a problem in getting the services of 33 consultants, but so great was the university's interest that there was a waiting list of people from several faculties who wanted to be consultants.

Roving reporters were to be appointed to circulate among the various groups and these people were to form a panel which would meet the entire body of teachers afterwards and summarize what each group had been discussing. This was to conclude the first day of the convention.

The second day was to open with an address on the role of ethnicity in educational performance, followed by further group sessions, this time organized on the basis of the grade level at which each teacher taught. These groups were to be led by a panel of practicing teachers together with a university consultant and the aim was to discuss the implications of the study at the various grade levels. The convention was to conclude with the teachers meeting in their locals under the chairmanship of the local president when the significance of the study in their particular school system would be discussed. This was the program.

The final briefing session was a large meeting, attended by some 50 university persons who met with Dr. Card and the president and secretary of the convention district. All the consultants and speakers were thoroughly familiarized with every aspect of the program and briefed on what their exact role was to be. Then the planners kept their fingers crossed! No one had ever tried anything quite like this before.

The convention was held on November 5 and 6, 1964, at the Macdonald Hotel, and everything went according to plan. From the very first presentation teacher interest was stirred and, far from flagging as the hours passed, it tended to increase. The groups actually discussed their problems; everyone had something to say; the university people were intimately involved in the cut and thrust of debate. Teachers backed professors into corners and engaged them in question and answer sessions right in the hallways. Attendance at all sessions of the convention was almost a hundred percent, even on the afternoon of the last day.

Final evaluation of the convention is not yet complete, but preliminary reports indicate that this was the most stimulating professional meeting that many of the teachers had ever attended and apparently they want more of the same fare next year.

Reference

Guidebook for Teachers' Conventions. (Edmonton: The Alberta Teachers' Association, 1964), p. 18.

PROFESSIONAL TEACHERS' PERCEPTIONS OF SOCIAL FACTORS INFLUENCING LEARNING *

B. C. Card

Introduction

For the purpose of this paper perception may be regarded in fairly general terms either as the complex process of investing experience with meaning, or as the consequence of this process, the acquisition of insight or new knowledge. In psychological theory perception appears to involve receiving "stimulus inputs" or environmental information and classifying or coding what is received according to some accessible symbolic model or system of categories which "represents environmental information in an economic manner" for the perceiver. (Harper, Anderson, Christensen and Hunka, 1964. Bruner, 1957) in the perceiving process receiving and categorizing environmental information may transform what is received, thereby generating new information. It is this new information which may loosely be called a 'perception' in the sense of new insight or knowledge for an individual.

While perception as a process is usually regarded as the subject of study for a psychologist or social psychologist, sociologists, too, are often concerned with the process and inevitably with the consequences of the process as they study values, Weltanschauungen, ideologies, utopias, collective representations, bureaucratic modes of thought, subjective aspects of social stratification, social roles, and manifest and latent functions, to name but a few social phenomena directly related to perception. No small part of the sociology of professions is concerned with perception,

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* Paper presented June 12, 1965, to Sociology Section, Canadian Political Science Association Meeting, University of British Columbia, Vancouver, B.C.

the nature of a profession's occupationally unique perception, the impact of this perception on interaction, and the consequences of this perception for the professional person's career, for his professional organization and for his non-professional social roles. (Naegele, 1956) One of the urgent concerns of professions and frequently of society is how to change and improve professional perception to keep pace with changing situations and needs and with the rapid growth of relevant or potentially relevant knowledge. (Hall, 1961)

Not least among the professions faced with increasingly imperious challenges and problems, especially in relation to what constitues an appropriate professional perception, is teaching. On the one hand the traditional and even fairly recently acquired professional perceptions of the teacher are rendered ineffectual or obsolescent in numerous ways by social change occurring within communities and the larger society. On the other, there is what has been termed the "knowledge explosion" which not only affects the preparation and up-dating of teachers in order to handle new curricula, but also the symbolic models or systems of categories with which the teacher is professionally equipped for the very process of perceiving. Dean N. V. Scarfe, a prominent Canadian educator recently appraised the situation facing secondary teachers in these words:

> Since society is now so rapidly changing and so dynamic, the school has to be creative rather than conservative, constructive rather than conforming. Children must be prepared for new ways of living, new ways of thinking and new ways of feeling. These changes are coming at us at so rapid a rate that, despite the excellent recommendations of royal commissions, there has to be a continuous built-in reappraisal of secondary education every few years. An experimental approach is essential, for few are the people who know exactly how to teach or what to teach in the new secondary schools of today. Still more difficult is it to know how to train teachers for the new and exciting tasks in these modern schools in the future. (Downey and Godwin, 1963)

That teachers in other levels of education and in other countries face similar dilemmas is evidenced in analyses of changing teacher roles, images and perspectives such as those attempted by Wilson (1962) in England and Margaret Mead (1951) and Brauner (1964) in the United States. A recent major review of research on teaching indicates the dynamic and somewhat disarrayed state of knowledge about teaching, a factor which can only be assumed to be reflected in professional perception of teachers. (Gage, 1963)

It is perhaps worth noting as part of this introduction that sociology as a discipline and the sociological approach or perspective which seems to have been diffused in the past quarter century to other fields of knowledge on which professional teaching depends, appears to be contributing also to the instability and dynamism of teacher perceptions. The teaching, theorizing, research and polemics of sociologists or of educators who make use of sociology appear to be affecting teacher perception on a fairly wide front. The work of Girard in France, of Glass, Floud and Halsey in England, of Dodson, Brookover, Coleman and Rogoff in the United States, and of Porter, Naegle and Jones in Canada, to mention only a few sociologists by name, have presented research and commentary that have challenged, or are likely to challenge the professional teacher's perception in their respective countries. It is in the context of these sociological and other forces affecting teacher perception that the research problem and procedures next outlined took form.

The Research Problem and Procedures

The specific research problem reported in this paper represents part of a larger and continuing research program requested by teachers with the intent of modifying their professional perception with the help of university personnel. The teachers were all from town or rural schools in North-Eastern Alberta. According to an opinion survey conducted in 1963 by their elected professional organization representatives, the teachers were extremely dissatisfied with the traditional two-day convention they had been holding for many years. (Verney, 1965) When an interdisciplinary ad hoc group of professors met with the representatives to plan the 1964 convention, it became evident that the teachers wished to close the gap between the theories they heard from speakers and themselves as professionals in schools. Further, they wanted a change in convention theme, from the traditional themes of "child development", "guidance", "improving instruction" to one that dealt with the values, group differences and other social phenomena in their own area.[1] Also they wanted a sequence of conventions in which the 1964 convention would lay a foundation for the 1965 convention, and so on. As the teacher-professor planning group saw things in the spring of 1964, what was wanted was a convention which would be based on sociological study of the convention district. The convention program was to be built around the research report. The appropriate theme appeared to be "Social Factors Influencing the Learner in Our Area". The teachers assessed themselves an extra-dollar convention registration fee and obtained a grant of $1000 from the Alberta Advisory Council on Educational Research to provide a modest research budget.

(It may be noted parenthetically that the teachers are following the same procedure for their 1965 convention, which will be built on research directed toward the theme "Social and Psychological Factors Influencing the Learner". While sociologists from the Department of Sociology and the Department of Educational Foundations directed the 1964 research, the 1965 research will be directed by both sociologists and psychologists. Professors from educational administration and the curriculum and instruction fields have participated in the research planning and in the convention, along with their graduate students, and it is hoped they will take over the research projects for conventions in subsequent years, thus building on the foundation of social and psychological knowledge acquired in 1964 and 1965. This convention design is itself a case study of changing professional perspective, among both teachers and professors.)

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[1] In the planning sessions it was evident that the thinking of some of the teacher representatives reflected the impact of sociology courses they had recently taken, in conceptualizing the problems they felt teachers should be dealing with.

The 1964 research was planned to go through three stages:

1. An analysis of census data for the area involved.
2. An inventory of teacher views (perceptions) of social factors influencing learners in their classrooms, schools and communities.
3. An interview survey of a sample of homes from the area to ascertain the relationship of home social factors to school achievement.

The first stage, completed in May, 1964, provided background material supplied to teachers for pre-session study and also enabled the research staff to design an appropriate teacher inventory schedule. The second stage, begun in June 1964, involved securing from each teacher who was willing to participate a completed inventory. There were four purposes for the inventory, which was evolved from a synthesis of local social conditions with major generalizations or significant hypotheses from the sociology of education.

1. To involve each teacher as early and as actively as possible as a personal contributor to the convention.

2. To supply each teacher with a set of concepts, definitions, and operations, necessary for completion of the schedule, which might help him

complete the schedule accurately and with understanding. At the same time it was hoped that the schedule with its instructions, would provide at least a limited system for categorizing 'environmental information' and thus be useful for perceiving social factors and discussing them later. It was assumed that only a minority of teachers would have had sociological training.

3. To ascertain the extent to which certain social factors having currency in the American and British literature of sociology and education were perceived by teachers as factors operating in the convention district.

4. To obtain insight into the differential perceptions of the teachers themselves. It was hypothesized that perceptions would vary with teacher sex, status, age, grade level of teaching and with the particular county or school division in which they taught. These variables were included in the design of the teacher inventory schedule. Others were excluded deliberately in order to minimize the possibility of adverse reaction to the schedule.

5. To compare teacher perception of social factors influencing pupil learning with social factors shown by other means to be related to school achievement. This comparison, it was believed, would not only serve as an excellent focal point for group discussion during the convention, but would also be useful in detecting possible "teacher bias" in perceiving social factors. Other studies have shown that teachers tend to see classroom problems in terms of the need for order and decorum rather than student mental health, that they do not always correctly assess the sociometric status of their pupils, that they tend to underestimate pupil desires for self-improvement, that they are not superior to their students in judging who will drop

out of school or achieve school honors, that they see things through middle-class lenses, (Stern, 1963) and that they perceive the appropriateness of their own behaviour differently than administrators, school board members and citizens. (Brookover and Gottlieb, 1964) Whether teacher bias, 'occupational psychosis' or 'professional deformation' exists in perceiving social factors related to learning is not only important for understanding teacher professional perception, but also for hypothesizing relative to the teachers' role and role conflict in their classroom, school and community situations.[2]

With these purposes in view a schedule was designed. It consisted of 15 questions, five of which dealt with the teacher attributes needed for the independent variables, three with convention arrangements, and six with social factors influencing learning. The inventory schedule was accompanied by 5 pages of instructions and definitions which teachers were asked to read before answering. The sequence of answering operations, designed to assure maximum comprehension, can be discerned in the following instructions:

> We assume that there are social forces or pressures on pupils which you have observed or experienced in (1) the classroom group, (2) in the school as a whole, and (3) in the community. We assume further that these forces, operating in the classroom, in the school or in the community, may help or may hinder the pupil as a learner.
>
> In order to facilitate communication about the social forces affecting the learner that you have observed, we have listed five forces or factors which we think might be operating in each situation -- the classroom, the school and the community. We do not know how important they are from your viewpoint. Please indicate how important

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[2] Robert K. Merton, (1957) discusses the relationship between bureaucratic structure and personality, including the ways in which bureaucrats perceive problems and social situations. Neal S. Gross, Ward S. Mason and Alexander W. McEachran (1958) discuss role expectations in terms of differing perceptions, and show basis for role conflict.

> or influential you think they are singly, and when they are combined in pairs. In the space provided add other factors which you see as important. If you have comments, illustrative anecdotes, or criticisms which will give added insight, these too will be appreciated. Use the reverse sides of answer sheets if you need additional room for writing.

The instructions for the classroom level illustrate the kinds of instructions given for the other two levels.

> Think of the classroom you now teach in if you are an elementary school teacher. If you are a subject specialist think of the pupils you teach when you meet them in an instructional group. If you are an administrator, think of the classrooms you visit. Think of what you have observed and experienced about your pupils in general. What factors in their backgrounds seem to influence their learning in the classroom?
>
> Among the possible factors:
>
> Non-English Language: Some language other than English is spoken by the learner at home or in his community.
>
> Non-Standard English Language: The learner does not use accurate "middle class" English that characterizes classroom instruction. He reflects a non-standard English, such as the language of the "lower class", of the unskilled worker, or of teen-age double talk or slang. He uses unfinished sentences, few adjectives or adverbs. (The teacher frequently has to understand the way things are said more than what is said, to understand the non-standard English).
>
> Ethnicity: Identification of the learner with an ethnic group or with the way of life of a group which is set apart for reasons of distinctive national origins, religion, language, customs, or race. In the classroom the learner identifies himself with such a group, or other students may identify him as belonging to an ethnic group.
>
> Level of Living: The economic level of living which a learner enjoys, such as the money his parents have, the quality of housing and household furnishings, of clothing, nutrition, etc. The learner in a classroom may reflect the advantages or disadvantages of either a high or low level of living, of affluence or poverty.
>
> Family Expectations: The learner in the classroom may reflect what his parents or siblings expect of him as a learner. Do they expect him to work well, to cooperate with the teacher, to carry on schooling to high school, beyond high school, or do they not?

At the school level the following factors and their descriptions were given:

Peer Influence: Does association of student with student in the school affect the pupils as learners? This influence may be expressed as students mingle as friends, as members of cliques or clubs, as outsiders to these student groups, as the popular, as the snubbed or rejected.

Bussing: Is your school divided in terms of students who come by bus vs. those who do not come by bus, i.e., who live close to the school or who have cars? Is bussing a social factor that affects the learner in your school?

Ethnic Difference: Is there any cleavage among students in the school along ethnic lines? Do members of all ethnic groups have the same chance for popularity, student leadership, awards, athletic teams, and other incentives that may influence their attitude toward school and learning?

Country-Town Difference: There may be differences between farm and non-farm students, or between those who come from villages and towns and those who come from rural areas. Do these differences, carried over to the school program and the student body, affect the learner?

School Social Climate: This is a more general factor. It refers to the total climate or atmosphere your school generates for learning. It is affected by the quality of the school's leadership, both professional and student. It is characterized by the amount of willing cooperation forthcoming from students and from staff, by the level of morale among both.

At the community level these factors were used:

Home Demands: This refers to demands parents make of their children, help with housework, chores, farm operations, care of younger brothers and sisters, etc.

Mass Media: This factor includes the radio, television, magazines, movies, etc. The mass media compete for students' time. They may also influence student attitudes and knowledge.

Ethnicity: Ethnicity at the community level may influence the learner in different ways. For some, being a member of the ethnic group may mean limited participation in the community and limited acceptance as a person. For others, it may mean extra classes or activities outside of school to acquire an ethnic language and culture. For some, ethnicity may mean competition for loyalty between the ethnic culture and the country, between the ethnic culture and the school, between the school and the ethnic family.

Youth Patterns: These may include dating patterns, such as school girls dating older boys not in school, boys' pre-occupation with cars and motorcycles or scooters, parties organized by teen-agers outside of school, drinking patterns, etc.

Work Opportunities: This factor refers to the abundance or scarcity of work in the local area. Limited work opportunities may mean that nearly all youth will eventually have to leave the local area if they are to be employed. It may operate selectively, leading to early leaving of girls, while boys remain at home or in the local area for work. Local work opportunities may be a factor affecting the learner.

It is noted that although some of the factors tend to overlap, such as ethnicity, used three times, and family expectations and home demands, these factors are defined in such a way that their operation in a given situation level is spelled out. Ethnicity, Non-English, bussing, country-town difference and work opportunities are factors which were suggested by the census analysis. Family expectations, non-standard English, for which Basil Bernstein's theory of social learning was clearly in mind (Bernstein, 1961), level of living, peer influence, school social climate, mass media and youth patterns were suggested primarily from sociological and educational literature.

The teacher inventory and accompanying instructions were tested on a group of graduate students in educational administration and on the teachers of a school in Metropolitan Edmonton. After revision they were submitted to the 525 teaching personnel and school principals of the First Edmonton Convention District of the Alberta Teachers' Association.[3] Replies

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[3] The Alberta teaching force of approximately 15,000 persons in 1964 are mandatory members of the Alberta Teachers' Association. The Association has organized its membership into Convention Districts, which for rural Alberta amounts to an organization of teachers by local regions. The First Edmonton District, which requested this research, is one of these regional convention districts. The title implies no direct connection with Edmonton, though the Convention District is within the larger Central-Alberta region of which Edmonton is the dominant centre.

TABLE 1

First Edmonton District A.T.A.--Teacher Attributes
June, 1964--Sex and Teaching Level

Sex	Grade Level				No Response		Total
	1-3	4-6	7-9	10-12	by level	by sex	
Male	11	38	84	92	1	-	226
Female	111	91	45	17	4	-	268
						5	5
Total	122	129	129	109	5	5	499

Table 2

First Edmonton District A.T.A.--Teacher Attributes
June, 1964--Age and Teaching Level

	Grade Level				Total
	1-3	4-6	7-9	10-12	
Under 20 years	1	2	2	1	6
20 - 24 years	27	35	31	16	109
25 - 29 years	13	16	28	13	70
30 - 34 years	10	13	17	12	52
35 - 39 years	16	12	13	18	59
40 - 44 years	18	19	12	11	60
45 - 49 years	14	7	9	22	52
50 - 59 years	18	16	14	14	62
60 or over	4	8	5	2	19
No response: by grade level	1	1	0	2	4
by age					6
Total	122	129	131	111	499

TABLE 3

Estimated Ethnicity of Teachers
in 1st Edmonton District of the A. T. A.
October, 1964[a]

School Division	Estimated Ethnicity Ukrainian	Non-Ukrainian	Total
Thorhild	58	16	74
Athabasca	25	78	103
Lac La Biche	25	48	73
Smoky Lake	69	7	76
Two Hills	83	6	89
Lamont	92	9	101
TOTAL	352	164	516
Per cent	68	32	100

[a] Estimated from School Division teacher lists by a panel of local teacher organization officials. The 1963-64 teaching body is assumed to approximate closely this estimate.

were received from 499, who may be considered as the entire population of the Convention District. Tables 1 and 2 show the sex, age and grade level of teaching of the respondents.

In order to minimize possible bias or misunderstanding by asking teachers about their individual ethnic backgrounds, teacher ethnicity was estimated from the 1964-65 teacher lists. The estimating was done by a panel of teacher convention officers well acquainted with the teachers of their local districts. This estimate was obtained in October 1964. It was assumed by the panel that despite a possible 10 percent teacher turnover between June and October, the proportions of teachers by ethnicity would remain constant. Table 3 shows the estimated ethnic distribution of teachers by county or school division. Note the large proportion of teachers of Ukrainian background, 68 percent of the entire teacher population.

Characteristics of the First Edmonton District

In addition to knowing some of the attributes of the teaching population of the first Edmonton District, the major social characteristics of the area itself must be delineated as a background against which to present an analysis of teacher perceptions. The District consists of four counties, one municipal district and one improvement district lying between the North Saskatchewan and Athabasca Rivers. Most of the District is between 30 and 120 miles north and east of Edmonton, with which it is connected by both roads and railroads. The area covered is 8591 square miles, of which approximately 53 percent is assessed.[4] The remainder is undeveloped or Crown land, mostly tree-covered. Agriculturally the district contains some

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[4] Derived from the Annual Report of the Department of Municipal Affairs of the Province of Alberta, 1963, pp. 213, 245 and 271.

excellent mixed farms and a large number of smaller, poorer farms frequently on sub-marginal land. The total population in 1961 was 45,397, of which 10,793 lived in towns and villages, 34,604 on farms. Between 1951 and 1961 the rural population had decreased by 18 percent, while the town and village population had increased by 22 percent.[5] There was a net loss of 11 percent of the entire population over the decade. The district's 1961 school population was 11,869, which was 1 percent less than it was in 1951.[6] While the entire area's population was in transition, it was apparent that youth and young adults were the most mobile segments of the population rather than school-age children and older adults.

The District has a diverse ethnic composition. In 1961, 52 percent of the population was classified in the Census as Ukrainian, 11 percent British, 8 percent French and 8 percent Polish. These were the major ethnic components of the population. Other Europeans comprised 22 percent of the population, Indians 3 percent. If Metis were included among persons of Indian ancestry, 3 percent would probably be too small for this part of the population.

The religious affiliations of the area's population parallel quite closely the ethnic pattern. The proportions of population in the major denominations in 1961 were 31 percent in the Greek Orthodox Church, 24 percent in the Roman Catholic Church and 22 percent in the Ukrainian-Greek Catholic Churches. The United Church accounted for 10 percent, the Anglican Church 5 percent of the religious affiliations.

The schools of the area represented considerable centralization, made possible by an extensive system of improved rural roads and intensive use of school buses. Twenty-four of the 46 schools contained 10 or more classrooms. Only 10 schools contained three or fewer classrooms. One characteristic of the school situation that came somewhat as a surprise was the high retention rate of the 15-19 year age group. The Alberta average retention rate at this age level in 1961 was 62 percent. In the First Edmonton District it was 74 percent, 70 percent for boys, 78 percent for girls.[7]

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[5] Canada Census, 1961

[6] Annual Report, Department of Education, Alberta, 1951 and 1961

There was, however, considerable differentiation within the District as a whole, as shown by the following thumb-nail sketch of each local government sector.

Thorhild County: Ukrainian 52 percent. Heavy decade population loss both rural and urban. Retention rate for 15-19 year-olds, 72 percent for males, 81 percent for females, or 76 percent for both. Teachers are 78 percent Ukrainian.

Athabasca County:[8] British 27 percent, Ukrainian 27 percent, Polish 11 percent. Rapid growth of towns and villages (72 percent decade gain), but considerable rural loss (17 percent). Retention 15-19 year-olds 74 percent for males, 83 percent for females, total 78 percent. Teachers 24 percent Ukrainian.

Lac La Biche Improvement District:[8] French 40 percent, Ukrainian 17 percent, Indian 12 percent, British 12 percent. Small rural decline (5 percent) but fairly rapid urban growth (45 percent). Retention 15-19 year-old males 51 percent, females 60 percent, total 55 percent. Teachers are 34 percent Ukrainian.

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[7] Computed from 1961 Canada Census and Annual Statements Respecting Attendance, July, 1960 - June 30, 1961, Alberta Department of Education.

[8] In these two cases the School Division area extended beyond the area of the County and the Improvement District. An Improvement District is a rural area which has not yet attained local municipal government.

Smoky Lake County: Ukrainian 75 percent. Rural loss 22 percent, urban gain 34 percent. Retention 15-19 year-old males 75 percent, females 78 percent, total 76 percent. Teachers are 91 percent Ukrainian.

Two Hills County: Ukrainian 76 percent. Rural loss 20 percent, urban gain 32 percent. Retention 15-19 year-old males 71 percent, females 77 percent, total 74 percent. Teachers are 94 percent Ukrainian.

Lamont Municipal District: Ukrainian 63 percent, Rural loss 23 percent, urban loss 2 percent. Retention 15-19 year-old males 75 percent, females 85 percent, total 80 percent. Teachers are 91 percent Ukrainian.

Analysis of Teacher Perceptions

The analysis of teacher perceptions of social factors influencing learning in the classroom, in the school and in the community corresponded to the three tasks performed by respondents on the inventory schedule. These tasks were: (1) ranking the five given social factors in order of importance; (2) writing any additional factors, comments, illustrative anecdotes or criticisms on a permissive basis; (3) making forced choices between pairs of the given factors. Since the analysis of data from tasks (1) and (3) is somewhat repetitious, only the analysis of paired comparison data will be reported in depth. However, the analysis of data from tasks (1) and (3) provide an index of the reliability of teacher perceptions of social factors as they filled out the schedule. When the ranks of social factors obtained by the two methods of judgment were compared it was found that for the 499 teachers as a group the reliability was statistically perfect ($r_s = 1$) at the classroom level. At the school level perceptions were slightly less reliable ($r_s = 0.9$), while at the community level it was still less reliable ($r_s = 0.7$).

Analysis of the 234 written comments received reflected greater assurance of teacher perception at the classroom level, both in terms of the number of responses and the definiteness and sureness of what was said. For the classroom situation 128 comments were made, compared to 70 for the school situation and 36 for the community situation. Further, 93 of the classroom statements reinforced or emphasized the importance of social factors, compared to only 7 statements which minimized their importance. Most comment was focussed on family expectations, (36 reinforcing and 1 minimizing comment). Two additional factors to the five given factors were mentioned with considerable frequency, the teacher 12 times and the peer group 16 times. At the school situation level of perception 24 of the 70 comments were classified as reinforcing, 30 minimizing the importance of social factors. Most reinforcing comments were focussed on peer influence among the factors given, and on family influence among factors added by teachers. The minimizing comment was associated with bussing, ethnicity and country-town differences. At the community situation level of perception 18 of the 36 comments reinforced or emphasized social factors, while 4 comments tended to minimize them. Home demands, mentioned 9 times, were the major focus of comment. One tendency in the written statements was noted at all levels. This was an emphasis on factors which inhibit or retard learning rather than on factors which encourage or promote learning. The fact that only 234 written comments were elicited from 499 teachers suggests that any conclusions based on analysis of these comments be accepted with caution. A number of factors may have affected a teacher's decision to comment or not to comment, such as pressure placed on the teacher to complete the schedule rapidly, fatigue from doing the tasks requested, or lack of familiarity with the factors given or the concepts used in stating them.

Data from analysis of paired comparisons are shown in Tables 4 to 15. At each situational level of perception respondents were asked to say which was the more important factor influencing learning for ten pairs of factors. The tables present the results of these choices in "Z" or sigma units of the normal curve.[9] For a given factor, such as non-standard English in Table 4, a score of 0.000 would mean that as this factor was compared with each of the four other factors it would be perceived as the more influential in 50 percent of the comparisons. The actual scale value of -0.050 means that non-standard English was regarded as the more influential in slightly less than half of all the possible comparisons. The higher or the lower the scale value, the greater is consensus that a given factor is more influential or less influential than the other factors. The highest scale value obtained in perception of any factor is found in Table 11 where peer influence as seen by teachers of grades 7 to 9 has a scale value of 1.019. This score represents a high degree of consensus in perception, but not unanimity, since peer influence was chosen over bussing 128 times, but over school social climate only 72 times. As seen in Table 2 there were 131 teachers who made these comparisons.

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[9] I am greatly indebted to Dr. Steven M. Hunka, of the Department of Educational Psychology, University of Alberta, Edmonton, for suggesting the paired comparison method early in the research planning and for programming and seeing through to completion the processing of the paired data on the IBM 7040 computer. The detailed steps of analysis may be found in Torgerson, (1958), pp. 166-170.

As each of the variables hypothesized as being related to teacher perception is considered, reference to Tables 1 to 3 will indicate who among the teachers is doing the perceiving, while Tables 4 to 15 indicate what they perceive in terms of scale values. Only the more important or obvious relationships observable in the data can be noted. Many of the _ex post facto_ explanations, inviting hypotheses or tantalizing comments that could be made as the findings are examined and related to other theory and research must be passed by for the sake of brevity.

Sex Differences in Perception: At the classroom level, (Table 4) there appears to be little difference in the perceptions of male and female teachers. Females seem more aware of the level of living differences than males, but not markedly so. However, in perceiving social factors at the school level, (Table 5), there is evidence of more consensus among female than among male teachers. The former see peer influence and social climate as more influential than do the latter, and country-town difference, ethnic difference and bussing as less influential. At the community level (Table 6), males and females are very consistent in their assessment of mass media, home demands and work opportunities, but somewhat divergent as females see youth patterns as more influential on learning than do males, and ethnicity as less influential. Since female teachers are concentrated in Grades 1 to 6, (Table 1), the possibility exists that sex differences in perception could be mistaken for grade-level differences, or vice versa. However, comparison of Tables 4 to 6 with Tables 10 to 12 suggests that there may be some residue of differential perception associated with sex, particularly at the school level, where all the

TABLE 4[a]

Teachers' Views of Relative Influence on the Learner of Social Factors Operating in the Classroom, by Sex of Teacher

Sex	Ethnic Identity	Non-English Language	Non-Standard English	Level of Living	Family Expectations
Male	-.577	-.210	+.026	+.269	+.492
Female	-.548	-.234	-.050	+.368	+.464

TABLE 5[a]

Teachers' Views of Relative Influence on the Learner of Social Factors Operating in the School, by Sex of Teacher

Sex	Bussing	Ethnic Difference	Country-Town Difference	School Social Climate	Peer Influence
Male	-.652	-.274	-.345	+.659	+.612
Female	-.777	-.484	-.452	+.742	+.971

TABLE 6[a]

Teachers' Views of Relative Influence on the Learner of Social Factors Operating in the Community, by Sex of Teacher

Sex	Ethnicity	Work Opportunities	Home Demands	Mass Media	Youth Patterns
Male	-.593	-.355	+.266	+.346	+.336
Female	-.819	-.324	+.286	+.324	+.533

[a] These tables are compiled from the paired comparisons of Questions 9, 11 and 12 of the Inventory. A high positive number indicates that for most teachers the factor was a first choice when paired with the other factors. A zero indicates a first choice 50 percent of the time. A negative number indicates that the factor was a second choice more than a first choice. A high negative number indicates the factor was a second choice for most teachers.

female scores are more extreme than the scores of teachers of grades 1 to 3 or 4 to 6. A similar tendency is found in relation to youth patterns and ethnicity at the community level of perception. Sex of teacher apparently cannot be overlooked as a variable in what teachers perceive, particularly at the school and community levels. At the classroom level sex appears to have little effect on teacher perception.

Teacher-Age Differences in Perception: As seen in Table 2, age-groups of teachers range in size from 109 for the 20 to 24 year-olds to 19 for the 60-and-over group. Teachers under 20, six in number and including some interne-teachers, were not included in this analysis of perceptions, though with greater numbers this would be an interesting age-group to study.

Bearing in mind the differences in the size of the perceiving age-groups, it is observed that the age-group that sees social factors most differently is the 60-and-over. In the classroom situation family expectations are not so important according to the oldest teachers as they are to other age-groups. In the school situation the oldest teachers do not perceive peer influence as a factor to the same extent as younger teachers. In the community situation they also assign less influence to youth patterns and home demands. Another relationship between teacher age and perception appears for the mass media factor in the community situation, where the influence attributed to mass media on student learning appears to be directly proportional to teacher age.

There is some evidence that young adult teachers tend to see social factors different than older adult teachers, that is, those 35 or 40 and over. For instance, at the classroom level, Table 7, older

TABLE 7

Teachers' Views of Relative Influence on the Learner of Social Factors Operating in the Classroom, by Age of Teacher

Age	Ethnic Identity	Non-English Language	Non-Standard English	Level of Living	Family Expectations
20 - 24	-.501	-.192	-.111	+.264	+.540
25 - 29	-.435	-.267	+.031	+.199	+.471
30 - 34	-.566	-.195	+.026	+.345	+.391
35 - 39	-.755	-.114	+.124	+.278	+.467
40 - 44	-.555	-.349	-.045	+.493	+.457
45 - 49	Not computed				
50 - 59	-.751	-.343	-.012	+.416	+.691
60 or over	-.430	-.136	0.00	+.371	+.195

TABLE 8

Teachers' Views of Relative Influence on the Learner of Social Factors Operating in the School, by Age of Teacher

Age	Bussing	Country-Town Difference	Ethnic Difference	Peer Influence	School Social Climate
20 - 24	-.845	-.373	-.267	+.824	+.661
25 - 29	-.547	-.407	-.548	+.760	+.742
30 - 34	-.543	-.417	-.229	+.765	+.424
35 - 39	-.797	-.491	-.460	+.966	+.783
40 - 44	-.771	-.303	-.299	+.699	+.674
45 - 49	-.754	-.355	-.528	+.876	+.760
50 - 59	-.758	-.421	-.376	+.621	+.933
60 or over	-.477	-.375	-.228	+.455	+.625

TABLE 9

Teachers' Views of Relative Influence on the Learner of Social Factors Operating in the Community, by Age of Teacher

Age	Ethnicity	Work Opportunities	Home Demands	Mass Media	Youth Patterns
20 - 24	-.634	-.342	+.372	+.123	+.482
25 - 29	-.665	-.360	+.474	+.228	+.324
30 - 34	-.687	-.360	+.395	+.331	+.320
35 - 39	-.796	-.283	+.222	+.450	+.407
40 - 44	-.701	-.535	+.101	+.463	+.672
45 - 49	-.851	-.322	+.188	+.466	+.518
50 - 59	-.775	-.280	+.160	+.529	+.366
60 or over	-.397	-.294	-.025	+.553	+.163

teachers show greater consensus in attributing influence to the level of living factor and lack of influence to the non-English language factor. At the community level, Table 9, younger teachers see home demands as important more than older teachers, while teachers in their forties tend to see youth patterns as more important than younger teachers or teachers fifty and over. With one exception, marked differences of perception do not occur with respect to factors in the school situation, Table 8. The exception in on the part of teachers over 50, who have a high degree of consensus that school social climate is more important than other school level factors.

Teaching-level Differences in Perception: For the classroom situation, Table 10, there appears to be considerable similarity in perception regardless of grade-level at which the teacher does all or most of his teaching. Primary-level teachers show slightly more consensus about the influence of family expectations, while elementary and senior-high level teachers indicate more consensus about importance of level of living. Elementary teachers lead all others in minimizing ethnicity as a factor in the classroom.

In the school situation, Table 11, differences of perception are more marked. Junior and senior high school teachers see peer influence as an influential factor more than do primary and elementary school teachers. The striking agreement of junior high school represents the highest perceptual consensus found in this study. A perceptual gradient shows up clearly as ethnic difference is seen more important as teaching level rises. Other factors are perceived quite similarly for teachers of all grade levels.

For the community situation there are two teaching-level perception

TABLE 10[a]

Teachers' Views, by Grade Level of Teaching, of Relative Influence on the Learner of Social Factors Operating in the Classroom

Grade Level of Teaching	Social Factors				
	Ethnic Identity	Non-English Language	Non-Standard English	Level of Living	Family Expectations
Primary	-.567	-.201	-.048	+.280	+.536
Elementary	-.693	-.192	+.045	+.399	+.442
Junior High	-.449	-.263	-.009	+.236	+.485
Senior High	-.588	-.225	-.035	+.368	+.479

TABLE 11[a]

Teachers' Views, by Grade Level of Teaching, of Relative Influence on the Learner of Social Factors Operating in the School

Grade Level of Teaching	Social Factors				
	Bussing	Country-Town Difference	Ethnic Difference	Peer Influence	School Social Climate
Primary	-.605	-.408	-.192	+.553	+.651
Elementary	-.685	-.385	-.227	+.642	+.654
Junior High	-.855	-.406	-.484	+1.019	+.726
Senior High	-.636	-.409	-.633	+.976	+.703

TABLE 12[a]

Teachers' Views, by Grade Level of Teaching, of Relative Influence on the Learner of Social Factors Operating in the Community

Grade Level of Teaching	Social Factors				
	Ethnicity	Work Opportunities	Home Demands	Mass Media	Youth Patterns
Primary	-.557	-.353	+.289	+.307	+.314
Elementary	-.538	-.276	+.274	+.339	+.201
Junior High	-.768	-.479	+.305	+.392	+.550
Senior High	-.988	-.301	+.265	+.324	+.700

[a] These tables are compiled from the paired comparisons of Questions 9, 11 and 12 of the Inventory. A high positive number indicates that for most teachers the factor was a first choice when paired with the other factors. A zero indicates a first choice 50 percent of the time. A negative number indicates that the factor was a second choice more than a first choice. A high negative number indicates the factor was a second choice for most teachers.

gradients observable in Table 12. High school teachers, more than lower level teachers, see youth patterns as an influential factor and ethnicity as an uninfluential factor in learning. Teachers perceive the mass media, home demands as important, and work opportunities as unimportant without much variation from grade-level to grade-level, though junior high school teachers attach slightly more importance to mass media and home demands, and slightly less to work opportunities than do other teachers. When perceptions of factors operating in the classroom, school and community are compared, it is observed that the most marked differences in perception occur with respect to factors outside the classroom. At all teaching levels there is considerable consensus about factors seen as influential or as uninfluential.

County or School-Division Differences in Perception: Tables 13, 14, and 15 need to be analyzed in relation to the data shown in Table 3 relative to teacher ethnicity and to the short sketches of each of the six counties or school divisions presented on pages 15 and 16. The most striking perceptual difference observed in the three tables is that of Lac La Biche teachers, who at the classroom level show less consensus than all others that family expectations are important and that ethnicity is unimportant. They also see non-standard English as less important than all other teachers who are about evenly divided in their perceptions of this factor. In the school situation Lac La Biche teachers show considerably less consensus about the importance of peer influence or school social climate than all other teachers. The majority of Lac La Biche teachers see ethnic difference in the school as an influential factor, while the majority of all other teachers see ethnicity as relatively uninfluential. Further, bussing is seen as uninfluential by a smaller proportion of Lac La Biche teachers than other teachers. A pattern of perceptual differentiation appears also for factors operating in the community situation, where Lac La Biche teachers are about evenly divided with respect to the influence of youth patterns and mass media, while majorities of all others see these two factors as more influential than other community factors. Lac La Biche teachers also show the least consensus about the unimportance of work opportunities and ethnicity, and by a small margin, the most consensus about the importance of home demands.

Though the perceptions of teachers in Lac La Biche vary considerably from those of teachers in other counties or school divisions, there is no comparable variation in the perceptions of teachers in Athabasca County, where the smallest proportion of Ukrainian teachers and the second smallest proportion of Ukrainian inhabitants are found. For the classroom situation Athabasca teachers show slightly more perceptual consensus about the importance of family expectations, slightly less about the importance of level of living. For the school situation they manifest less consensus about the unimportance of ethnic difference than the four predominantly Ukrainian counties and school division, but it is in the perception of this one school situation factor alone that Athabasca teachers show any tendency to differ from the Ukrainian-area teachers. For the community situation Athabasca teachers differ from Ukrainian-area teachers only in the reduced proportion who see youth patterns as influential and work opportunities and ethnicity as uninfluential, though differences with respect to the last two factors are small.

When Thorhild, Smoky Lake, Two Hills and Lamont are compared, the areas where Ukrainian ethnicity is predominant both in the entire

TABLE 13[a]

Teachers' Views of Relative Influence on the Learner of Social Factors Operating In The Classroom

School Division or County	Social Factors				
	Ethnic Identity	Non-English Language	Non-Standard English	Level of Living	Family Expectations
Thorhild	-.534	-.279	-.036	+.394	+.455
Athabasca	-.660	-.250	+.080	+.205	+.626
Lac La Biche	-.325	-.160	-.176	+.341	+.319
Smoky Lake	-.647	-.166	+.022	+.326	+.466
Two Hills	-.619	-.304	-.001	+.414	+.510
Lamont	-.613	-.172	+.034	+.250	+.501
All Divisions	-.564	-.223	-.008	+.315	+.480

TABLE 14[a]

Teachers' Views of Relative Influence on the Learner of Social Factors Operating In the School

School Division or County	Social Factors				
	Bussing	Ethnic Difference	Country-Town Difference	School Social Climate	Peer Influence
Thorhild	-.769	-.531	-.303	+.625	+.979
Athabasca	-.763	-.287	-.571	+.759	+.861
Lac La Biche	-.522	+.161	-.539	+.425	+.474
Smoky Lake	-.732	-.534	-.209	+.663	+.811
Two Hills	-.602	-.551	-.279	+.753	+.679
Lamont	-.785	-.485	-.546	+.880	+.936
All Divisions	-.682	-.360	-.399	+.678	+.763

TABLE 15[a]

Teachers' Views of Relative Influence on the Learner of Social Factors Operating in the Community

School Division or County	Social Factors				
	Ethnicity	Work Opportunities	Home Demands	Mass Media	Youth Patterns
Thorhild	-.803	-.446	+.224	+.341	+.683
Athabasca	-.715	-.291	+.306	+.380	+.320
Lac La Biche	-.198	-.155	+.355	-.002	.000
Smoky Lake	-.887	-.321	+.300	+.437	+.472
Two Hills	-.803	-.438	+.324	+.475	+.441
Lamont	-.769	-.483	+.215	+.478	+.558
All Divisions	-.676	-.353	+.280	+.345	+.404

[a] These tables are compiled from the paired comparisons of Questions 9, 11 and 12 of the Inventory. A high positive number indicates that for most teachers the factor was a first choice when paired with the other factors. A zero indicates a first choice 50 percent of the time. A negative number indicates that the factor was a second choice more than a first choice. A high negative number indicates the factor was a second choice for most teachers.

population and among professional teachers, only minor variations in perception are found. For instance, for the classroom situation Thorhild teachers seem somewhat less united in minimizing ethnic identity as a factor than the teachers of the other three areas, while Lamont and Smoky Lake teachers minimize non-English language as a factor less than Thorhild and Two Hills teachers. While the majority of teachers from the four areas see level of living as an important factor, the smallest majority is found in Lamont. The same kind of analysis could be continued for the school and community situations which indicate local-area variations in perceptions where Ukrainian ethnicity may be considered a constant. Further research is needed to show relationships of differences in perceptions in the four predominantly Ukrainian areas and the unique characteristics of the schools and communities of each of the areas. For instance, is the difference in perception of level of living as a classroom factor associated with local economic conditions in the four areas? A number of hypotheses formulated from the data in Tables 13 to 15, if tested, could possibly illuminate the differences and similarities in the perceptions of Ukrainian- area teachers.

Ethnicity and Perceptions: Teacher perceptions can be considered in relation to two kinds of ethnicity variables, first, the known ethnic composition of the counties or school divisions, sketched earlier in this paper, and second, the estimated ethnic background of the teachers themselves, whether they are Ukrainian or non-Ukrainian, as shown in Table 3. It is observed that in the four areas that are relatively homogenous ethnically, where the largest proportion of the population is Ukrainian, the teachers have greatest consensus in assigning ethnicity the least importance of all factors, with the exception of bussing.

In these four areas the teachers themselves are predominantly Ukrainian, 78 to 91 percent. It is further noted that in each of these four areas the retention rates of 15-19 year-old students indicates that the schools are "over-achieving" compared to Alberta schools generally. Although the areas and the teachers share an ethnicity that distinguishes them from many other Canadians, they do not see ethnicity as an important factor in any situational level. It has been suggested that this may represent a form of cultural blindness or insensitivity on the part of these teachers, since their own careers and the comparative industry and success of their students can scarcely be dissociated from ethnic backgrounds. Is it possible that the ethnicity factor, seen as unimportant, may be of considerable importance but not perceived as such by the teachers? This question cannot be answered definitively from the present data. Given the tendency noted in the teacher comments on the inventory schedule for factors which inhibit teaching or learning to be given more attention than factors which aid or help, it is possible that Ukrainian-area teachers may not have perceived ethnicity as important because it is a positive factor in their areas.

In the case of Athabasca County, where teachers are 24 percent Ukrainian, but where the two major ethnic segments of the population are British and Ukrainian (27 percent each), ethnicity is perceived as the least important of factors in the classroom and community, and third to the least in the school situation, at which perceptual level consensus is considerably weaker. Here is the phenomenon of teachers who are largely non-Ukrainian, in an ethnically heterogenous area, also minimizing ethnicity. It is noted as well that their youth-retention rate is considerably above the Alberta level, on a par with the rates of the predominantly-Ukrainian areas.

However, the ethnic segments in Athabasca County, in addition to being strongly British and Ukrainian, are nearly all Northern European. The similarity of ethnicity-factor perception of teachers in Athabasca County and the four predominantly Ukrainian areas suggests that where schools are doing comparatively well ethnicity does not appear to be a factor, for the kinds of ethnics found in the five areas. Also, this similarity casts some doubt on the above suggestion that teachers of Ukrainian ancestry in predominantly-Ukrainian areas may be culturally insensitive to ethnicity, especially if ethnicity operates as a positive factor in learning. Perhaps this is a characteristic of non-Ukrainian teachers also, as in the case of Athabasca County.

Lac La Biche teachers, 34 percent of whom are Ukrainian, are closer to Athabasca teachers in ethnicity than to teachers in the four predominantly Ukrainian areas. In terms of their background, they could be expected to perceive similarly to Athabasca teachers. However, they perceive ethnicity quite differently to all other teachers. What they see must shape their perceptions, rather than their own backgrounds. The ethnic composition of Lac La Biche is French 40 percent, Ukrainian 17 percent, Indian 12 percent (probably higher if Metis were to be included), and British 12 percent, according to the 1961 Canada Census. The schools are under-achieving by Alberta standards in terms of youth retention. A majority of teachers see ethnicity as an important factor in the school situation. Those majorities who see it as unimportant in the classroom and community are much smaller than those of any of the other areas. From the Lac La Biche data it therefore appears that teacher perception of ethnicity is associated with the kinds of ethnicity and probably the under-performance of ethnic pupils. This observation is supported by written comments of teachers, ten of which specifically mention the problems of teaching Metis and Indian students. Any other kind of ethnic was rarely mentioned.

Summary and Conclusions

In the contexts of rapid social change, of unprecedented expansion of knowledge, specifically of sociological knowledge and theory related to education, and of a concomitant dynamism in the teaching profession, an attempt has been made in this paper to determine empirically teacher perceptions of social factors influencing learning. The perceptions of a population of rural teachers were studied by means of the paired comparison method, supplemented by ranking and written comments. The conclusions reached from this research are limited to the population studied and by the adequacy of the measuring instrument used. Within these limits it was found:

1. Teachers generally see as important or influential family expectations and level of living in classrooms, peer influence and school social climate in school situations, and youth patterns, mass media and home demands at the community situation level.
2. That teachers are most ambivalent in perceptions of non-standard English, a factor measured in the classroom situation.
3. Teachers show considerable to marked consensus in perceiving as unimportant non-English language and ethnic identity in the classroom, country-town difference, ethnic difference and bussing in the school situation, and work opportunities and ethnicity in the community situation.

It was also found that teacher perceptions varied by sex of teachers, by age of teachers, by grade-level of teaching and most markedly, by social and economic characteristics of the specific areas in which teachers were employed. There was some evidence that teachers tended to perceive social factors inhibiting learning more frequently than those which enhance or contribute to learning. The possibility that teachers of Ukrainian ancestry working in predominantly Ukrainian areas are culturally insensitive to ethnicity has not been supported, though there does appear to be some association between perception of ethnicity as a social factor affecting learning and certain kinds of ethnicity in combination with school under-achievement.

Three general conclusions and one pertinent query terminate this paper. With respect to social factors influencing learning, it has been demonstrated that: (1) differential perception of these factors by teachers is associated to some extent with variables (sex, age and ethnicity), whose locus is within the teacher as a perceiving person or organism: (2) differential perception is also associated with variables whose locus is in the external social environment, i. e., the variables of situation, grade-level and local area.

The third conclusion is somewhat different. Teachers in this study perceived as influential for learning those factors chosen for the measuring instrument directly from current sociological and professional education emphases (family expectations, level of living, peer influence, school social climate, youth patterns, mass media), but they chose as uninfluential those factors selected directly from knowledge of local conditions (ethnicity, non-English language, bussing, country-town differences, work opportunities). Two factors that were used do not fit into this conclusion: home expectations, chosen from local knowledge but which was probably seen as closely related to family expectations, and therefore influential; and the factor drawn from British sociological theory, non-standard English, which elicited ambivalent perceptions.

The query that needs to be raised is whether this pattern of perceiving as important factors taken from the literature and as unimportant factors taken from the local environments of the teachers reflects a professional or occupational bias? Two alternative explanations to the one suggested by the query are that the instrument itself was biased, or that teachers perceive objective reality accurately and have no bias. If there is no instrument bias and if teachers perceive accurately, then the perceptions demonstrated in this study confirm current emphases on social factors found in the literature of sociology and professional education. Do teachers perceive in this way because they are told this is what they should perceive in their teacher education and professional meetings and journals and sociology courses? Further inquiry is necessary to penetrate beyond the perceptual pattern disclosed in this study, for when teachers perceive what appears to be textbook-like factors associated with learning, and minimize factors which appear obvious given the local social context, there is room for query and doubt.

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SAMPLING AND RESEARCH PROCEDURES USED WITH PUPILS

B. Y. Card

Sampling Procedures

The population with which this research was concerned was the 12,167 pupils in grades I to XII attending school in the 1st Edmonton District in 1963-64 and 1964-65. The purpose of the research was to explore social and social-psychological factors which were believed or suspected to be associated with learning, defined arbitrarily as school achievement. Ideally it would be desirable to select a probability sample which would represent students from the first grade through the last grade of high school. This, for a number of reasons, was impossible. Instead it was decided to select from the grade IX pupils a focussed non-probability sample which would be stratified according to school achievement. Such a sample would tell, with accuracy, a great deal about the grade IX pupils as a population in their own right, and would also permit hypotheses to be made respecting pupils in lower or higher grades.

With this sampling goal in mind the records of all the 1st Edmonton District Grade IX pupils who wrote Alberta Department of Education examinations in June, 1964, were examined, from which high, medium and low achieving students were selected. The high achieving students were those who ranked in the top 11 percent (stanines 8 and 9) of all grade IX pupils in the province who wrote examinations. The low achieving students were those who ranked in the bottom 11 percent (stanines 1 and 2). It was found that there were 91 high achievers and 117 low achievers. To obtain a group comparable in size of medium achievers, a randomly selected half of the pupils, ranked at stanine 5, was added to the sample. This medium achieving group numbered 117. The entire sample of 325 became the basic sample from which other samples were selected. (See Table 1 for the stratification by achievement of the basic, the home interview and the youth survey samples.)

TABLE 1

DISTRIBUTION OF GRADE IX PUPILS BY ACHIEVEMENT IN THREE SAMPLES

Achievement	Sample					
	(1) Basic		(2) Home Interview		(3) Youth Survey #1	
	f	%	f	%	f	%
High	91	28.4	56	31.3	79	33.2
Medium	117	35.8	60	33.5	104	43.7
Low	117	35.8	63	35.2	55	23.1
Totals	325	100.0	179	100.0	238	100.0

The first sample selected from the basic sample was for home interviews, with an attempt being made, frequently at the price of much searching and travelling by interviewers in the field, to maintain rather strictly the quotas found in the basic sample when it was stratified along the dimensions of school achievement, geographic area of residence (school division or county), and type of residence (rural or village/town). The degree of success in preserving these strata in the home interview sample was high, as seen when columns (1) and (2) are compared in Table 1 for school achievement, columns (2) and (3) of Table 2 for geographic area, and columns

(1) and (2) of Table 3 for types of residence. (Stratification of pupils by sex was considered of limited importance in the surveys made in Project 614. However, since sex is a variable in a few of the analyses attempted, the sex stratification of the three samples is shown in Table 4.)

TABLE 2

DISTRIBUTION OF PUPILS BY GEOGRAPHIC AREA IN THE PUPIL POPULATION AND IN THREE SAMPLES

			Samples					
Area	(1) Pupil Population f	%	(2) Basic Gr. IX f	%	(3) Home Interview f	%	(4) Youth Survey #1 f	%
Lamont	2,278	18.7	77	23.7	40	22.3	56	23.5
Two Hills	2,105	17.2	60	18.4	29	16.2	45	18.9
Smoky Lake	1,592	13.1	49	15.1	30	16.7	41	17.2
Thorhild	1,757	14.5	30	9.2	18	10.1	25	10.5
Athabasca	2,598	21.4	81	25.0	44	24.6	54	22.7
Lac La Biche	1,837	15.1	28	8.6	18	10.1	17	7.2
Totals	12,167	100.0	325	100.0	179	100.0	238	100.0

TABLE 3

DISTRIBUTION OF PUPILS BY TYPE OF RESIDENCE IN THE BASIC AND HOME INTERVIEW SAMPLES

Type of Residence	(1) Basic Sample f	%	(2) Home Interview Sample f	%
Rural	246	75.6	126	70.4
Village/Town	79	24.6	53	29.6
Totals	325	100.0	179	100.0

TABLE 4

DISTRIBUTION OF PUPILS BY SEX IN THREE SAMPLES

Sex	Sample					
	Basic Gr. IX		Home Interview		Youth Survey #1	
	f	%	f	%	f	%
Male	150	46.2	78	43.5	109	45.8
Female	175	53.8	101	56.5	129	54.2
Totals	325	100.0	179	100.0	238	100.0

The two remaining samples used are the youth survey samples No. 1 and No. 2. In a sense both are "accidental" to the extent that some pupils in the basic sample were not included, for reasons largely beyond the control of the research staff. In the first youth survey sample an attempt was made to contact all pupils who were in the basic grade IX sample a year later. This would have included the drop-outs, grade IX repeaters, pupils who had moved out of the 1st Edmonton Area and those absent on the days when a research assistant administered a questionnaire to the grade X classes in all the 1st Edmonton District high schools. While it was hoped to reach 325 pupils, only 238 of the basic sample provided questionnaire data and thus became the first youth survey sample. The sampling bias introduced by the loss of 83 pupils over the year interval was as expected, i.e., in the low proportion of low achievers in school in grade X and hence a higher proportion of high and medium achievers. (See Column (3), Table 1). The probable effect of this bias would be to reduce frequency and intensity of significant differences of association between social and social-psychological factors and achievement, if it is assumed that these factors operate even more strongly among repeaters, drop-outs and absentees than among regularly attending but low-achieving grade X pupils.

The second youth survey sample consisted of 182 pupils whose questionnaires were selected without reference to any criteria from the 238 questionnaires of the first youth sample for content analysis of questions dealing with attitudes toward school, home and community. This second youth survey sample was not stratified in any way. It might be regarded as a "chunk" sample taken from the first youth survey sample.

After this explanation of sampling procedures two concluding comments are in order. First, for grade IX pupils the samples appear to represent faithfully the high, medium and low achievers in all dimensions of stratification used, with the exception of the accountable bias among low achievers in the youth survey sample. Second, the use of grade IX pupils as a sample of all pupils in the 1st Edmonton District, while of heuristic importance, is open to the criticism that grade IX students do not represent other students in the same proportion from one school division or county to another. (Compare Columns (1) and (2), Table 2.) This bias needs to be kept in mind when applying the findings from the studies based on grade IX samples to the pupil population.

Research Procedures

Research procedures connected with census analysis and survey of teacher perceptions of social factors influencing learning have already been indicated in the chapter on teacher perceptions. The task remaining is to describe briefly the procedures used for the research reported by Knill, Regan and Dockrell and summarized without comment in the Appendix.

Sources of data used provide a convenient way of talking about procedures.

1. School Records: Data for the basic grade IX sample came entirely from school records -- the individual pupil's achievement record, his sex and locality. School division and county offices supplied the legal descriptions of farm student home locations, a listing of parents' occupations, and distance of daily bus travel for pupils transported to school. Analyses of these data in relation to school achievement were reported to the 1st Edmonton District 1964 Convention.

2. Home Interviews: A fourteen-page home interview schedule was prepared in October, 1964, as part of a class project in Educational Foundations 414 -"Sociology of the School." Adaptations in some of the scales used in the schedule were worked out during the spring and summer of 1964. The scales used were those of Edwards (1942) and Wilmott (1962) for level of living, and of Rosen (1956) for achievement orientation. A scale of occupational aspiration was adapted from Rosen's work (1959), while Bernstein's linguistic theory of social learning (1961) provided a basis for constructing a measuring device for non-standard English.

Interviewing was conducted in the field of student volunteers from the "Sociology of the School" class, research assistants and the professor in October, 1964. This yielded 73 home interviews, the analysis of which was reported to the 1964 Convention. In May-June, 1965, a two-person interview team of Ukrainian-speaking teachers, one of whom was involved in the fall interviewing, was engaged to increase the completed home interview to a total of 179. It was assumed that the interval of seven to eight months between interview periods did not affect responses to questions asked. A comparison of interviews obtained during the two periods suggested that this was a valid assumption.

3. Youth Survey: This was conducted in May-June, 1965, by a research assistant who visited schools having grade X classes. All grade X pupils in attendance the day he was present at a school completed the questionnaire. Time and research staff limitations precluded analysis of more than 238 questionnaires, the first youth survey sample, and also the source of the second youth survey sample used for content analysis.

4. Motivation Study: The Edwards, McClelland tests were administered to all Grade X pupils in the 1st Edmonton District in the spring of 1965 by a graduate research assistant. Scores of all available members of the basic sample were analyzed. The bias reported above for the youth survey sample exists in this aspect of the study also.

An effort was made unsuccessfully by the field interviewers in May-June, 1965 to conduct the youth survey with pupils who had dropped out of school after Grade IX. Most of these pupils had left home or could not be located.

Data from the basic, home-interview, and motivation youth survey samples were coded and placed on IBM cards. The Chi-square test was used to measure the association between social and social-psychological variables and school achievement, with the minimum level of confidence being placed at the .05 level. Tests for trends made use of computational procedures advocated by Maxwell (1961).

As a consequence of the sampling and research procedures carried out for Project 614, empirical data on social and psychological factors influencing learning in their own rural area were made available to 1st Edmonton District teachers during their 1964 and 1965 conventions, thus laying a foundation of some knowledge, but perhaps more questions and hypotheses, for future conventions and further research. However, neither the convention reports nor the present publication exhaust the analyses that could be made from data obtained in Project 614. Studies could be made, for example, of relationships between a number of the social and social-psychological variables already used and such variables as pupil achievement in specific school subjects, scores on standardized ability and language tests, and other data recorded for grade IX students. Data collected during the home interviews constitute a source of information on population characteristics and rural and village/town living conditions as well as raw material needed for revising level of living scales. There remains a further task, one initiated by the papers of this volume, of relating the research from Project 614 to studies done in Alberta and elsewhere. This task, more one of scholarship than research, is still a challenge. If the challenge were met, it could add to the general fund of knowledge on social and social-psychological aspects of school achievement, particularly in Western Canadian society. However, all the research of Project 614, at least for the present, remains at an exploratory level, where the factors dealt with have been related to learning in an extraneous more than in an explanatory fashion. This is at once a limitation of the research and a source of hope. The hope is that the research, the reports, the conventions, and not least, the cooperative experience in an inquiry of this nature will lead to several "next steps" in research and scholarship, in vitalized and more relevant university courses, and in improved inservice education for teachers of the 1st Edmonton District and elsewhere.

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MOTIVATION FOR LEARNING

W. B. Dockrell

We are adding constantly to our store of knowledge about education; rapidly developing new theories to explain these findings; and constructing more effective techniques for the classroom to apply the new concepts. Ultimately, however, the success of our present educational revolution depends on the ability of the teacher in the classroom to use these new ideas. Sarason (1962) says that a teacher is a "psychological tactician". This implies the ability to apply general psychological principles to specific classroom situations. A teacher has to understand not only the general principles but has to know enough about the specific group of children in the class to apply them. To learn more about their pupils the First Edmonton District of the Alberta Teachers' Association sponsored a series of studies. The findings discussed in this article are drawn from one of these studies.

These data were obtained on a sample of grade IX pupils in N. E. Alberta. They were divided into high, average and low achievers. These categories are based on average standing in the grade IX departmentals. The high achievers are a sample of the top 11 percent; the middle achievers are a sample of the middle 20 percent and the low achievers a sample of the bottom 11 percent. Our purpose was to isolate some of the distinguishing characteristics of these groups, not to make prediction easier, but to hold a mirror up to the school. If we can distinguish between those we help and those we do not, we can learn something about the nature of the help we provide. We deliberately avoided such factors as intelligence and social adjustment, not because they are not important, but because we believe that there are other important stable characteristics which have not always been given their due weight.

All of us possess stable ways of behaving in similar circumstances. We do our best under certain conditions and less than our best under certain others. We may enjoy competition and the stimulus of belonging to a team; we may prefer to set our own standards and to work on our own. We refer to these patterns or preferences as values or motivation. The first three dimensions studied were an active or a passive orientation, an individual or collective orientation, and a future or present orientation. Each of these is a dimension and it is possible to fall anywhere along the scale. These statements are based on the Rosen Value orientation test. (Rosen 1956) We examined the values of the parents, what parents thought were the values of their children and the youngsters' own expressed values.

TABLE 1

VALUES OF PARENTS

1. Active-passive - significant at $p < .001$
    - active orientation associated with high achievers, passive orientation with low achievers

2. Individual-collective
    - too many small cells
    - probable high individual associated with high achievement medium independent + high collective associated with low achievement

3. Future-present
    - too many small cells
    - probably N.S.

Parents of high achieving youngsters saw themselves as being active and individual. They believed that they could, by their own efforts, overcome difficulties, and their ties to their families were relatively weak. A passive orientation was associated with low achievement and both medium individual and a high collective achievement was associated with low achievement. This picture is confirmed interestingly in other studies. In a Chicago study (Mullen 1962), for example, it was found that when pupils were matched for I.Q. it was the children of working mothers who did better in school. These were all children from single parent homes. The working mothers were presumably those who preferred activity and self-reliance to social allowance. We do not know what the other consequences of this attitude were, though a recent British study points to a high incidence of psychosomatic illness in this active group. (Musgrove 1963)

TABLE 2

PARENTS' PERCEPTION OF YOUTH VALUES

1. Active-passive
   - significant at $p < .001$ level
   - "active" association with high achievement
     "passive" association with medium and low achievement
2. Individual-collective - N.S.
3. Future-present
   - significant at $p < .001$ level
   - "high future" associated with high and medium achievement
   - "medium future" + "high present" associated with low achievement

When we examine what parents thought of their youngsters we get a slightly different picture. This part of the study gave the differences which were statistically most significant. These are the areas where the differences between the groups of achievers are greatest. The parents of high achieving students thought their children were active like themselves and were greatly concerned about future goals rather than with present satisfactions.

TABLE 3

YOUTH VALUES

1. Active-passive (female)

    - significant at $p < .01$ level

    - "active" associated with high achievement
      "passive" with low achievement

2. Active-passive (male)

    - significant at $p < .025$ level

    - "active" associated with high achievement
      "passive" associated with low achievement

3. Individual-collective (female)

    - significant at $p < .01$ level

    - "high individual" associated with high achievement
      "medium individual" + "high collective" associated with low achievement

4. Individual-collective (male)

    - significant at $p < .05$ level

    - "high individual" associated with high achievement
      "high collective" associated with low achievement

5. Future-present (female) - N.S.

6. Future-present (male)

    - significant at $p < .01$ level

    - "medium future" associated with high achievement
      "high future" associated with medium achievement
      "high present" associated with low achievement

partitioning

- tendency for porportionately more "medium future" than "high future" to be high achieving as compared to medium achieving is not significant.

- significantly greater proportion of "high presents" than "high and medium futures" were low achievers.

High achieving students, both boys and girls, described themselves as being active. We have complete agreement here between the parents and the youngsters. On the individual-collective dimension there is, however, a difference. High achievers, both boys and girls, describe themselves as individual in orientation, and the low achievers describe themselves as being collectively oriented. Yet their parents did not see this difference. The parents of children with an individual orientation had the same orientation themselves and were perhaps not aware of the strength of the group ties of their youngsters. The younsters' perception of themselves was at variance with their parents' perception of them on the dimension of future-present orientation. There was no association between high marks and future orientation for girls, and for boys the association was between medium future orientation and high marks and high future orientation and medium marks. Recent American studies with young people in the job retraining programs show high and completely unrealistic expectations of the future among the participants in these programs. While they verbalize a high future orientation they act a high present orientation. The successful girls do not seem to be concerned for the future at all. This may be because of current cultural patterns. Girls expect to marry and job plans are secondary. The girl who is a good student doesn't see academic success as relevant to her goals.

The complicated picture presented by the boys is, I think, worth close examination if we are to hold the mirror to our schools. It is the boys with limited orientation to the future who do well in school. They want to go to university without quite knowing why. The high future orientation on the part of middle achievers may, as I have suggested, be to some extent lack of realism. It may also mean that some youngsters who are really interested in the long term don't see the relevance of school. It could be that few of us at fifteen can see the importance of the subjects taught in school and that we just go along with it as a means to a fairly clearly defined short term end.

The alternative explanation of this relationship is related directly to school practise. It may be that what we teach in school really is irrelevant not only to our pupils' current interests but also to their long term aspirations. Whether our curriculum really is irrelevant or not, many of the pupils who are most concerned about the future see it that way. To what extent is this apparent irrelevance a function of the academic strait-jacket? If all pupils have to follow exactly the same program it can hardly be relevant to them all. Would a greater degree of specialization earlier make the relevance of school more obvious?

Another problem that emerges from the data is raised by the active-passive dimension. There seems to be a general pattern that is not specific to school. Low achieving pupils are themselves passive and are the children of passive parents. If the passivity is not a result of our teaching, it can be very little consolation to us that we do not stir these youngsters out of their apathy. We may not have taught these pupils to be apathetic but it is perhaps worth our while trying to think of ways of inducing them to be more active.

The second aspect of the study was an investigation of the personal values of students. This work was based in large part on the theories and techniques of McClelland.(1961) The first dimension studied was McClelland's entrepreneurial character. He has shown that people of this kind make successful businessmen and that the presence of this character trait is related to growth in gross national product. We find many of these people, or perhaps more accurately, a general regard for this kind of person during a period of rapid economic expansion. In societies where this kind of attitude is not valued there is little economic expansion. The characteristics of this kind of person make him sound like the ideal pupil. He prefers personal responsibility. He likes to be judged on the basis of his own performance. Perhaps, because he accepts personal responsibility he sets reasonable goals for himself. He takes a risk - but a calculated risk: he is no gambler. Finally, he likes clear knowledge of results. He is not prepared to work unless he can see that he is getting somewhere. Why, then, does he not succeed in school? We are all so familiar with the Fords, Carnegies, and Nuffields who did not have an education that we take this lack of education for granted. But what does the failure of this particular type of student tell us about the educational system?

By contrast the pupil with a need for social approval does succeed in school. (Edwards 1959) This is a person who is concerned with what is socially desirable, what is proper and respectable. The criterion of this group is the approval of people of high status, primarily parents, but also teachers. It is hardly surprising that youngsters of this kind do well in school when we remember that the major source of reward is teacher approval and parental approval. Surely no one ever reads the stirring adventures of Dick and Jane for their intrinsic appeal. They do it because teacher smiles if they do and frowns if they don't. So much of what we teach is of this kind. It may have ultimate value but it has little intrinsic appeal. Worse, it provides very little feedback of the kind necessary for operant conditioning. Cats will perform somersaults, pigeons will guide missiles to attack warships and children will learn arithmetic without bothering why, as long as each correct response is reinforced and each incorrect response is clearly not reinforced

TABLE 4

NEEDS FOR ACHIEVEMENT

1. McClelland's scale

Total sample	- no significant association - no significant trend
Males	- no significant association - no significant trend
Females	- no significant association - no significant trend

2. Edwards' achievement

Total sample	- association significant at $p < .0025$ - high scores on Edwards associated with high performance in grade IX.
Males	- association significant at $p < .025$ - high Edwards score associated with high performance in Grade IX. - trend significant at $p < .005$.
Females	- association significant at $p < .05$ - high Edwards score associated with high performance in grade IX. - trend significant at $p < .005$.

3. Edwards' affiliation

Total sample	- association (overall chi square) N.S. but trend significant at $p < .025$. - low Edwards scores associated with high performance in grade IX.
Males	- association - N.S. - trend - N.S.
Females	- association - N.S. - trend - N.S.

so that it may be discarded. Our education does not demand active problem solving behaviour that is immediately reinforced. Nor, of course, does life. We should, however, be concerned that those of our students who function in this way and who are likely to be successful businessmen cannot find an avenue to succeed in school. Once again the consolation that we might offer ourselves, (that school may not be the best place for incipient businessmen, but is the best preparation for the professions), turns out to be illusory.

We find that it is not distinguished lawyers, doctors or scientists who do well in school. In general, they are mediocre students and in some cases, like Winston Churchill, downright bad. A recent British survey of the most distinguished judges and scientists showed that they did not have good school records. Once you get to the top of the tree presumably there is no one to look up to for approval. (Hudson 1965) What is worse is that there is evidence that those who go into, for example, scientific careers because they do seek approval, either do not complete their program or do not have distinguished careers. (Blake 1965)

The successful students did not depend on the approval of their peers. In an extensive study of this need for affiliation, as it is usually called, Schacter (1959) isolated many characteristics of this group. They are joiners who find their standards in what is generally accepted. They are always willing to go along. This result supports the finding from the Rosen scale. Collectively oriented youngsters who look to their peers for their standards do not do well in school.

The data from the study of occupational aspirations are in accord with the previous results. Parents who were low in their vocational aspirations had children who were doing poorly in school. High parental aspirations were, however, no guarantee of success. Many parents entertained unrealistic

TABLE 5

OCCUPATIONAL ASPIRATIONS

1. Parents' occupational aspirations for sons

   - significant at $p < .025$ level - high aspiration level association with high achievement by student partitioning: greater proportion
$p < .01$ of students whose parents had very low aspirations were low achievers than were students whose parents had high, medium and low aspirations.

   - no significant association found when students with high and medium aspiring parents were compared to students with low aspiring parents.

2. Students' occupational aspiration scores

BOYS - significant at $p < .02$ level

- association between high/medium achievement and high aspirations and low achievement and low aspirations.

GIRLS- N.S. !

3. Boys' aspirations to white/blue-collar occupation

   - significant at $p < .001$ level

   - association between high achievement and white-collar aspiration; between low achiever and blue-collar aspiration. Little association for medium achieving group.

aspirations for children who were doing poorly in school. The boys themselves were in general more realistic. Perhaps their experiences with departmentals had convinced the poorer students that they could not aspire to high status jobs. For girls there was no association. The cultural pattern which stresses marriage and bars women from the more responsible posts in all professions, particularly teaching, is perhaps the basic factor.

The picture we see in the mirror is, in some respects, a disturbing one, especially for boys. It suggests that we have oversold the importance of education for economic reasons. Most boys who succeed value education only for its short term rewards. They study because we tell them to and because it attracts a certain glory. Our system does not leave enough room for those who seek personal satisfaction and not merely our approval. It is, unfortunately, this latter group who are likely to make the outstanding contributions in business, science and the professions. These findings correspond closely to findings in other investigations. We have solved many technical problems in education, problems of curriculum and instructional technique. We have, unfortunately, given the human problems a very low priority. It is time, I suggest, to switch our emphasis from content and method to teacher and pupil.

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LANGUAGE AND LEARNING

John Regan

In discussing the possibilities of changing culturally deprived children's pattern of school failure, Ausabel (1963) has said:

> ... it seems credible that most of the language retardation and its grim consequences for school learning could be prevented by an enriched program for pre-school education that would emphasize perceptual discrimination and language acquisition... It is the area of language development, and particularly with respect to the abstract dimension of verbal functioning that this type of child manifests the greatest degree of intellectual retardation.

He suggests that the implication of limited language experience is a dilemma that the school must solve or have its high aims frustrated forever. The present study provides examples of the effects of school achievement which may be linked to impoverished early language experience.

In this discussion, Bernstein's 'restricted' and 'elaborated' language codes are useful terms to categorize two styles of language experience. Bernstein (1965) says that these terms

> ... can be defined, on a linguistic level, in terms of the probability of predicting for any one speaker which syntactic elements will be used to organize meaning across a representative range of speech. In the case of an elaborated code, the speaker will select from a relatively extensive range of alternatives... In the case of a restricted code the number of these alternatives is often severely limited... On a psychological level the codes may be distinguished by the extent to which each facilitates (elaborated code) or inhibits (restricted code) an orientation to symbolize intent in a verbally explicit form.

Bernstein's theory arises from consideration of the Sapir-Whorf hypothesis which strongly suggests a relationship between language and behaviour. Henry Lee Smith, Jr., (1956) in restating the Sapir-Whorf hypothesis (which considers inter rather than intra language behavioural effects) refers to the properties of language as "obligatory categories".

> For the different ways in which languages structure experience, the obligatory categories into which the flux of experience is forced, make speakers of different languages see the world and relationships in the world of experiences in quite amazingly different ways.

Words may be considered as storage units of meaning which are carried ready for use in perceiving and discussing differences and particularly holding such differences permanently in our memory.

Words for shades of differences help us preserve for use the differences which are around us. Experts have elaborated vocabulary concerning their field. These vocabularies assist in the observing, remembering and using of finer separating qualities of the objects that are of concern. For example, a husband buying a spool of blue thread has only a rare chance of choosing the exactly matching colour, unless he is sent with a sample or a precise word to describe the shade.

Speaking of the effects of the availability of a range of lexical items to describe differences, J. B. Carroll (1964) states

> ... The very existence of contrasting words for different categories or for different values of a dimension draws attention to these categories or values, and if a person has to learn to use these words in a way that is acceptable in his speech community, he must of necessity notice and discriminate the corresponding stimuli....
>
> The important role of verbal mediators in behaviour is so well attested that it can hardly be denied.

Without the advantage of a spectrum of words locating distinctions we are often at a disadvantage in perceiving shades of difference. The richer and more elaborated our lexical range the finer will be our observation. Such an effect is cumulative. Ausabel (1963) speaking of impoverished language experience states:

> Social class differences in language and conceptual measures also tend to increase with increasing age, thus demonstrating the cumulative effects of both continued environmental deprivation and of initial deficit in language development.

Helping students to see differences between items, major and minor themes, causes and effects, is a major purpose of formal education. The child who comes to the school from a home where only the bare bones of language are experienced, where fine degrees of differences are not of concern, is at a disadvantage from the start. Unless a counterweight is thrown into the balance, this disadvantage will be compounded. This type of student is less comfortable with the whole area of language and falls increasingly behind in the school, the temple of verbal learning.

An observation of a verbalized concept of possession coming suddenly to an infant, suggests the possible primary connection between lexical elaboration and perception of relationships. An eighteen-month old child, from an elaborated language code home, was observed making an initial verbal connection between "shoe" and "mama". The child had previously referred to objects by name, i.e., shoe as "shoe", mother as "mama". She was observed to suddenly use "mama" for her mother's shoe. Rapidly the child began running from object to object categorizing each item as "mama" or "daddy". From the child's experience with words, an early appearance of a third more abstract "idea" from two more concrete ideas occurred.

Bernstein (1965) has said:

> Children who have access to difference speech systems... may adopt quite difference social and intellectual procedures despite common potentials.

We might imagine two equally talented youngsters just learning to understand their parents' language. Family R (using restricted code) and family E (using elaborated code) have lexically and syntactically different language styles. A matching of typical daily utterances in the two homes might show up as follows:

Family R (Restricted code)	Family E (Elaborated code)
No, you can't!	I would prefer you didn't do that!
Quiet!	Perhaps you would be quiet so that I can hear myself think!
Get out!	If you have finished disturbing your sister, you can get out right now!

Lexically and syntactically, family R's speech is of a denuded nature. Limitation in quantity and quality of words is reinforced by limitation in number and type of sentence structure. While the parents may be aware that there are shades of greens and blues, they are typically not interested in such fine distinctions as aqua, azure, turquoise, chartreuse, etc. In their imperative style, there is little room for consideration of possibility, little opportunity for considering personal involvement, choice, conditions, causes. This family is typified by concern with the concrete, with reliance on the non-verbal to command, punish, control.

The elaborated code family is quite different. Their days are full of discussions, pointing out and naming of objects; they play with words, with sensitive differences in systems and lexicon. Their uses of language go far beyond the concrete; language is the way one controls the world. They rely on words, not actions to scold or persuade. Whereas the other child learns that actions speak louder than words, this one learns that language, lexical and syntactical changes, are the way he gets what he wants. Family E provides the son with an increasingly wide repertoire of lexical and syntactical choices, topics and purpose for language. They are providing him with verbal blocks to manipulate which will set him well on his way to later sensitivity to fine, abstract differences that he will need to handle work in literature, science, mathematics, social studies, philosophy, psychology.

"Sensitivity" is the key word to the differences that exist between students from restricted and elaborated language code homes.

This sensitivity applies to

a) words themselves
b) shades of meaning
c) verbal persuasion
d) verbal manipulation
e) lexical and syntactical alternatives
f) possibilities and alternates themselves
g) general and specific categories

This child is becoming sensitive in ways which will facilitate achievement of the schools' purposes. He is being given an early foundation for more complicated thoughts, for ease in seeing inferences, connections, and distinctions. He will perhaps be better able to discuss with his later teachers the possible results on the world had Julius Caesar not been assassinated, the reasons why China threatens this or that country, the possible cause of a chemical change.

The restricted family's son likely has a bleaker school future. Growing up in a home where language experiences are narrow, he not only has a restricted vocabulary, he is less motivated to acquire more facility in language. He learns a limited lexical possibility; learns the words that restrict themselves to the concrete, that include whole classes of differences without these differences being brought into focus; he learns a restricted number of sentence structures, a restricted number of grammatical possibilities.

Again speaking of such a child from a language impoverished home

Ausabel (1963) says:

> ... the syntactical model provided him by his parents is typically faulty. Later on, when new concepts and transactional terms are largely acquired verbally, i.e., by definition and contact experience he suffers from the paucity of abstraction in the everyday vocabulary of his elders from the rarity of stimulating conversation in the home.

Restriction of this sort puts chains on the child's potential academic success. When he comes to the almost totally verbal school experience, he is at a disadvantage. This consequence is suggested by the data derived from the study sponsored by First Edmonton District of the Alberta Teachers' Association. One hundred and thirty-six grade nine students were grouped into three achievement categories, high, average, low as determined by the grade nine Department of Education examinations.

TABLE 1

ASSOCIATION BETWEEN SCHOOL ACHIEVEMENT LEVEL AND HOME LANGUAGE STYLE

1. Home language on elaborated - restricted scale
    - significant association at $p < .05$ level
    - high achievement associated with elaborated language code, low with restricted
    - little association with medium achievement
2. Home language style as estimated by interviewers
    - significant association at $p < .025$
    - high achievement associated with elaborated language

Table 1 indicates the substance of the relationship between school achievement and elaborated and restricted language code type homes. A significant association is found between elaborated codes and high school achievement and between restricted codes and low school achievement.

The study produced some additional information regarding school success and language experience.

TABLE 2

ASSOCIATION OF SCHOOL ACHIEVEMENT LEVEL AND LANGUAGE OTHER THAN ENGLISH USED IN THE HOME

- association with non-English language used by husband to wife significant at $p < .05$ level
- language used by father to children - not significant
- language used by mother to children - not significant

Concerning the children's school success, the language the parents speak to each other is more important than the language they speak to their children. If the parents do not speak English to each other, they do not feel comfortable in this language frame. A teacher will be wise to discover the language parents speak to each other rather than seeking such information as the language they speak to their children, the parents' birth place, or ethnicity (see TABLE 3)

TABLE 3

ASSOCIATION BETWEEN SCHOOL ACHIEVEMENT LEVEL AND ETHNICAL FACTOR

1. Birthplace of paternal grandfather	Not significant
2. Generation (Canadian) of father/ generation of mother	Not significant
3. Father's birthplace	Not significant
4. Birthplace of maternal grandfather	Not significant
5. Household ethnicity	Not significant

When the community sends a child to school from a restricted language code home, the school has a big task ahead. It must seek to introduce a compensation language experience which will open the lexical and syntactical slots. The earlier this is done the better. Certainly the deficiences must be worked on with an increase of energy each school year it is delayed.

Excluded from this discussion has been the social reinforcement of the effects of restricted language experience. Discussion could have included, for example, consideration of the social gulf that restricted and elaborated codes place between their speakers. The discussion has centred on the limitations placed on students' intellectual growth by limited early language experience because this problem of language impoverishment is a solvable one.

Highly educated, intelligent people arise from the restricted code families. Compensating counteracting qualities may be at the core of their success. We want to find and use these compensating, counterbalancing qualities. We are seeking ways of reversing the dire effects of language retardation. Ausabel has suggested two possible approaches:

> ... Within the regular classroom, setting two kinds of ameliorative approaches are possible, especially for those children who have not had the benefit of pre-school training. The first approach takes account of the culturally deprived child's slower and less complete transition to abstract modes of thought and understanding during the junior high-school period, and provides more concrete-empirical props and opportunities for direct physical manipulation and objects and situations in the presentation of abstract ideas and relational propositions.
>
> ... The second needed change within the classroom setting is the long overdue introduction of more imaginative and effective ways of teaching the language arts. More emphasis, for example, needs to be placed on the mastery of the principle syntactical forms in spoken and written discourse, through repetitive practice with feedback, than on the pedantic and essentially trivial labelling, and classifying of different varieties of grammatical structure. The culturally deprived child with the pragmatic and non-abstract approach to knowledge could not care less, after all, about the different parts of speech and the various esoteric names attached to the different uses of each; and for the most part he is correct insofar as the value or functional utility of such knowledge is concerned.

This latter suggestion is the source of greatest possible reversibility of the "grim" effects of restricted language codes. "A more imaginative approach in the language arts", -- is clearly not merely more traditional grammar, naming words with another name, but, above all, infinitely more stimulating lexical and syntactical elaboration through involvement in language, in stories full of rich lexical and syntactical variation. Perhaps there is need for a language laboratory in English.

Such children need verbal experience, need full, rich memories of verbal stimulation. The school must double, triple, quadruple the experiences in language of children from the restricted code family. It must ensure it provides situations, staff, timetables, to enable oral reading by teachers.

A paper by Vera John in Urban Education, in summarized research on the characteristics of children from low-income backgrounds, states

> ... McCarthy showed in her classic studies (1930) that low SES children use, on the average, shorter sentences and ask fewer questions than their middle-class agemates. Others have found that these children also have a more limited vocabulary and poorer articulation. This catalogue of measured differences between children from different socio-economic classes and ethnic groups can be expanded substantially. More important, however, is the recognition that though the forms of language as spoken by low-income, low status children clearly identifies them as having lacked certain types of verbal stimulation, it is in their use of language as a cognitive tool that low-income children are most deficient.

We have long known that restricted language experience brings the student to school not suitably prepared for reading and writing, or to be interested in sounds and shapes of language. In addition, if certain slots in his language experience are not opened, the future student is simply at an increasing disadvantage; he will fall even further behind as the school requires him to manipulate in his mind ideas for which his language experience has not given him the foundations.

The school must face the possibility that limited early experiences in facets of language are serious deterrents to the type of thinking it tests, passes and fails.

We accept the necessity for states of readiness in many school skills. We have left unconsidered perhaps the greatest readiness of all, the readiness that allows for growth on all academic levels, the readiness for verbal manipulation, for manipulation of symbols, for abstract thought. We have to remedy our neglect. The present study's findings suggest how vigorously the schools must start this work.

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THE SOCIAL CLIMATE FOR LEARNING

Wm. D. Knill

I. ASKING QUESTIONS

The educational process does not occur within a social vacuum but rather within the environmental areas of the school, the home, and the community. The social forces emanating from these three areas have a profound effect upon the learner -- this was clearly brought out at last year's convention. Additional data, this time gathered from the learner himself, are now available. The broad question asked was, "What social and physical aspects of the home, the school and the community does the student perceive as significant in his world of learning?"

The preceding articles have attempted to help you become more perceptive students of human behaviour. You have been exposed to the psychological dimensions and the linguistic dimension of learning and the contributions these disciplines can make to a better understanding of the educative process. Let us now turn to a third dimension: the social environment within which the teacher teaches and the learner learns. The constructs which are borrowed from sociology include ethnicity, social class, reference groups and peer groups, group norms and sub-cultures. How can we go about using these concepts to analyse and better understand the dynamics of learning? We should ask ourselves, "What unique aspects are there in these rural communities of Alberta which hinder or enhance the intellectual development of children? What are the important characteristics of your town? what characteristics are common to all small towns? The small town is a rapidly disappearing part of Canadian life. Is this for the better or worse?" Would you agree with one sociologist who has said:

> ... What the small town may have contributed in the past is one side of the coin; the other side is urbanism and the greatest opportunity in the history of man for him to reach his full potential. Where the small town kept him prisoner, urbanism gives him freedom of choice -- choice of education, choice of profession, choice of marriage. If the small town is passing, we can't bemoan it. (Hauser)

II. BACKGROUND

A brief review of some of the salient findings in last year's survey of teachers' perceptions will provide the background for this report. We are concerned with the students' perceptions of the physical and social aspects of their home, their school, and their community; whereas last year the research dealt mainly with teachers' perceptions.

The following generalizations were discussed thoroughly at the first convention in 1964:

1. Teachers did not view Ethnicity as a major social factor influencing the learner in the classroom.[1] Professor Hobart raised the question about the teachers' own ethnicity and suggested that possibly there was an ethnic bias in the teachers' perception -- that possibly the teachers were "ethnically blind" or insensitive to the ethnic factor in the classroom.

2. Teachers saw Family Expectations and Level of Living as the most influential factors operating within the classroom.

3. The major factor affecting the learner with the school was seen by the teachers to be Peer Influences. This factor became increasingly important in the senior grades and was emphasized the

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[1] See Chapter 1 for the definition of the terms ethnicity, family expectation, level of living, peer influences, social climate, youth patterns and mass media.

most at the junior high school level. The second strongest factor was Social Climate of the school.

4. The strongest influence upon the learner in the community was perceived to be Youth Patterns and the second strongest factor was Mass Media.

5. All schools except the Lac La Biche Improvement Area have surprisingly high retention rates. All, except this one, exceeded the provincial average of 62 percent. The average for the whole of District 1 was 74 percent (70 percent for boys and 78 percent for girls).

6. Teachers' perceptions of the factors which influence the learner is a function of such teacher variables as sex, age, and ethnicity. Perceptions of teachers also vary according to their teaching situation, the grade level they teach, and their particular local area.

7. A significant relationship was found between the occupation of the parents, and high, medium and low achievement of students in grade IX final examinations. The low achievement of students whose fathers are farmers or unskilled laborers, and the high achievement of students whose fathers are professionals, businessmen, or skilled workers was clearly indicated. One tentative explanation for this was put forth last year: the farms are "sieves" which keep back the academically weak, and the brighter children of the family leave the farm. This pattern may be perpetuating itself into the second and third generations.

III. THE ADOLESCENT SOCIETY

With this brief review as a background we shall now turn to some of the questions raised by the most recent study. The first intriguing question was, "What is the nature of peer groups and youth patterns which teachers and parents reported as most influential on the learner?". Are these peer groups and youth patterns actually an adolescent subculture which exists in a clearly definable state? Recent research indicates that such adolescent societies do exist, and serve as the most powerful determiners of our youth's behaviour. One research has described them as a jungle of rating and dating, and I have called them a nation unto themselves, with national dress, national customs and rituals, and speaking a language only they themselves understand. (Coleman, Knill) More humorously, the members of this sub-culture have been described as those who "suddenly begin to feel a great responsibility about answering the telephone", or "that period when a boy refuses to believe that someday he'll be as dumb as his father", or "that period when children feel their parents should be told the facts of life".

The emergence of a youth culture in many cities and countries throughout the world has been observed and reported upon by several social scientists. (Bernard) In an attempt to explain why these societies evolve and appear to have many common characteristics, it has been suggested that they occur when there has been:

1. a shift from rural to urban life
2. an emergence of an affluent society and an increase in leisure time
3. a high degree of industrialization
4. a great development in mass media

Applying these four criteria to the community of Edmonton and other metropolitan areas of Canada helps to explain why a distinctive youth culture is emerging. It also helps explain why the same phenomena is not occurring in your communities to the same degree.

The youth of your communities do not form an adolescent sub-culture to the same degree found in metropolitan centres because of the agricultural rural society which is characteristic of Zone 1. There are definite indications that the youth of these rural areas have taken some of the patterns of a youth culture -- but only the degree that the mass media of radio (particularly CHED and CJCA), television and teen-age magazines have brought this to them.

One hypothesis might be that teen-age societies exist in inverse ratio to the distance the community is located from the metropolitan area of Edmonton. This was substantially supported by my discussions with high school students of your area who feel that Fort Saskatchewan has a "youth crowd" much more characteristic of Edmonton youth than their own. They also felt that they were "with it" to a greater degree than the communities farther east: they appeared to feel that their youth activities were just right; not as extreme and "far out" as the Edmonton crowd, but also not as "square" or old-fashioned as communities farther down the line.

The high school youth of this area might be best described as "traditional rural". They are parent and home oriented: they subscribe to the same values as the larger community, and conflict and rebellion with parental and community expectations appear at a minimum. The organization of the schools and the community appears to be rigged, by design or by accident, to inhibit the development of a youth culture that is at variance with the larger society. For example, a main difference between the adolescents and the adults of the community is that the adolescents attend school. However, they don't congregate at the school outside of school hours, nor is much time provided for socializing within school hours. The school buses keep the young people separated and fragmented and the geographic distances of the farms also contribute to this. Such school policies as forbidding students to drive their own cars to school and making the school buses mandatory is a good example of an organizational device which discourages the development of youth cliques and youth "crowds" out of which develops a youth culture.

We shall now turn to these students' assessment of their schools, their communities, and their homes. One hundred, eighty-two students were surveyed and, although they came from different schools and communities, the commonalty of their responses makes it possible to report them as a single sample. Their points of view should provoke teachers and administrators into doing some soul-searching and self-questioning about what the school can do to assist students to prepare for the future. You may very well ask what responsibility the school must bear to compensate for lack of an adequate home or community environment: it is a question, however, that can only be answered by you, the teacher or principal.

IV. THE STUDENTS VIEW THEIR SCHOOLS[2]

If any group of statements can be regarded as being typically representative, the following statement sums up a general attitude held by the greatest number:

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[2] Knill, W. D., "Teen-Age Sub-Culture".

> The school is a place for learning. You get to know friends and the teachers educate you. You get to know how to get along with people.

An examination of favorable student responses on matters relating to the school under the headings physical and social aspects is presented in Table 1. The greatest single number of student comments that were made tend to refer to such things as "the purpose of learning" and "becoming educated".

Often the statements of this type are supplemented with a reference to education as a preparation for the future. Where such statements have been expanded upon, there is often a reference to "new ideas" in a sense that connotes more than just acquiring additional knowledge.

Peer Groups:

Table 1 indicates that ranking second in preference for students was what one student summed up as "togetherness with friends". It was evident that the school provides an important place for peer group contacts in the area surveyed. It might be tentatively hypothesized that the "at school" social contact plays a significantly greater role for the rural and small town students than for students from a larger urban area. Finally, it should be noted that, although a few students complained that other students spread gossip, this complaint was far more frequently made against the community as a whole.

Teachers and Administration:

Table 1 shows that relatively few complaints were made against the administration of the school; however, two quotations may illustrate a common point of view held by a minority:

> I disagree with some of the rules and regulations.....
>
> The school teaches all of the children the same knowledge even though each child is suited for a different work......

TABLE 1

FAVORABLE AND UNFAVORABLE COMMENTS OF STUDENTS REGARDING PHYSICAL AND SOCIAL ASPECTS OF SCHOOL

(N = 182)

	Favorable		Unfavorable	
	f	% of N	f	% of N
Physical Aspects				
Physical Surroundings	18	9.9	13	7.1
Program	188	103.3	83	45.6
Social Aspects				
Administration	5	2.7	25	13.7
Cooperation and/or Competition	20	11.0	2	1.1
Students	63	34.6	15	8.2
Teachers	27	14.8	49	26.9
No Answer	7	3.8	12	6.6

Turning to the section of Table 1 which deals with teachers, there are 27 favorable comments and 49 that express complaints of one kind or another. In expressing a positive attitude, one student stated:

> The teachers are very helpful and concerned. Good teacher-student relationships....

Taking into account the inevitable variations that exist between teachers, it is not surprising that a wide variation of both favorable and unfavorable comments are made.

The most common complaint related to the activities of teachers in the teaching situation: "Some of our teachers cannot teach and so the class is disrupted and we cannot learn anything". Some personality clash is evident in the student's comment that you occasionally meet "a teacher who rubs you the wrong way". Other students complain about discipline and maintain that some teachers have "favorites". The following is a rather typical complaint: "The attitude some teachers have about teen-agers.....these teachers pick on certain students and pamper others".

Another common complaint is that there is "the same thing every day", which might be interpreted as an indictment of either teaching methods or other school programs.

Courses:

Although no one specific course was mentioned often, a positive orientation toward one was most common. With both boys and girls there was a tendency to prefer physical education to any single academic subject. The second section of Table 2 provides a generalized course breakdown.

An examination of negative comments about school subjects shows that the greatest single complaint concerns the amount of homework assigned (and in several cases the students went so far as to maintain that there should be no homework at all). There were more complaints about academic subjects than about any other group of courses. Table 2 also shows that some students are not satisfied with the course offerings. Related complaints were made about inadequate facilities and lack of extra-curricular activities, but more students were satisfied with the situation than were not. Since several schools were surveyed, it might be hypothesized that some schools provide programs that are more adequate than others.

V. THE STUDENTS VIEW THEIR COMMUNITY

The first major point that emerges with respect to student reactions to their home town or community is that the widely varying environments of even this sample of two hundred led to radically different assessments of their areas. Thus, while nearly fifty students commented favorably about the size of their community or town, about twenty-five were even more vehement in their condemnation of the areas in which they live. The largest single group of complaints, sixty-eight, were of a related nature and are included in Table 3 under the heading Isolation. This includes complaints about a lack of community

TABLE 2

FAVORABLE AND UNFAVORABLE COMMENTS OF STUDENTS REGARDING SCHOOL PROGRAM

(N = 182)

	Favorable		Unfavorable	
	f	% of N	f	% of N
General				
Learning of Material	84	46.2	-	-
Preparing for Future	42	23.1	-	-
Course Comments				
Undifferentiated	8	4.4	5	2.7
Academic Subjects	11	6.0	7	3.8
Options	4	2.2	1	0.6
Physical Education	7	3.8	1	0.6
Courses Available	1	0.6	9	4.9
Homework, tests	-	-	31	17.0
Work	4	2.2	20	11.0
Extra-Curricular Activities	27	14.8	9	4.9

facilities for recreation and general geographic isolation.

Those who like the size of their community or town generally talk of the "friendly atmosphere of the town" or speak of it as being "small and not too crowded". Many students place emphasis on a preference for a quiet and peaceful atmosphere. Some of the same people, and others, then went on to voice complaints about the gossip which appears to be typical of a small community. One stated that, "I think people should learn to mind their own business". On the other hand, a problem that emerged with the small center was that "in your community you cannot always meet new people, you may want a change".

Students from the larger centers which have more recreational facilities often mention specific gathering places such as "the cafe" and the "pool shack". Such places are meeting places with friends, but some students in these same centers mention a lack of teen-age organization or clubs that are specifically teen-age oriented. Part of the difficulty might be attributed to "not enough people taking an interest in community affairs". Twenty-eight complaints about a lack of cooperation within the community were also made.

A number of the smaller centers are either static or declining in population and are becoming more and more dilapidated with the passage of time. This situation is clearly reflected in student comments. One student referred to his town as "unpainted rotten shacks"; another stated, "I feel some of the places should be renovated or demolished", while a third spoke of a "steady decrease in population". Conversely, communities such as Athabasca, which are developing and expanding, drew favorable comment.

Although Table 3 shows that only a small minority complained of

TABLE 3

FAVORABLE AND UNFAVORABLE STUDENTS' REACTION TO THE PHYSICAL AND SOCIAL ASPECTS OF THEIR COMMUNITY

(N = 182)

	Favorable		Unfavorable	
	f	% of N	f	% of N
Physical Aspect				
Size	48	26.4	24	13.2
Isolation	12	6.6	68	27.4
Appearance	14	7.7	19	10.4
Social Aspect				
Gregariousness	76	41.8	25	13.7
Co-operation	24	12.2	28	15.4
Ethnic and Religious Prejudice	-	-	5	2.7
No Answer	15	8.2	26	14.3

discrimination within their communities, the students who complained were emphatic. One student cogently stated, "There is great discrimination between the two main religious groups", and another complained, "the people in the community may not like you because you are not of their religion or nationality".

VI. THE STUDENTS VIEW THEIR HOMES

Table 4 indicates a general close orientation of students with their parents. One student stated, "My parents are very understanding and helpful. There is a good family relationship". The whole family came in for praise quite often; "Being with brothers and sisters and my parents is most appealing about my home". The parents play a significant role as confidants to most teenagers in the survey area. Another commendable parental act, according to students, is allowing them freedom: "I feel I have more freedom here to do and say as I wish". It is an examination of complaints that reveals several students feel that their parents are too strict. Arguments with parents appeared quite often and some complained of arguments between parents. It is interesting to see that close to 10% of the students feel that they are given the right amount of work to do while over 20% feel that they have too much work to do at home. In the latter group, a few remarked that their work at home made it difficult to get all the school work done. Only one individual said that he went to school to get out of work on the farm.

Complaints about the physical condition of the home took the form of a protest against not having a separate bedroom. This may in turn account for some of the complaints about siblings.

The complaint with regard to isolation is well summed up in the

TABLE 4

STUDENT REACTION TO PHYSICAL AND SOCIAL ASPECTS OF THEIR HOME ENVIRONMENT

(N = 182)

	Favorable		Unfavorable	
	f	% of N	f	% of N
Physical Aspect				
Size	3	1.6	13	7.1
Conveniences	29	15.9	13	7.1
Isolation	18	9.9	16	8.8
Appearance	4	2.2	3	1.6
Social Aspect				
Parents	111	61.0	44	24.2
Siblings	28	15.4	14	7.7
Work Burden	17	9.3	39	21.4
No Answer	15	8.2	48	26.4

response, "It is fifteen miles from nowhere". The isolation in some instances meant that there were fewer conveniences than in the towns and large urban areas. In other cases the isolation may cut the individual off from social contact with friends. At certain times of the year, road conditions create greater isolation and a few complaints about the roads were voiced. Those who prefer the isolation of the country account for about 10% of the students, and they show a desire for the peace and quiet of the farm or the opportunity to work close to nature.

Student Leisure Activities:

Although more students list reading more often as a leisure activity than any other activity, this is not an indication of the quality of reading done. A few mentioned that they read "adult" books but the majority made no differentiation. Over one-half of the students have hobbies and within this group is a great variety of pursuits. Girls seem to favor sewing over other hobbies, but there is no clearly marked preference. Many students just mentioned "work on my hobby", without providing any indication of just what this hobby was.

A similar number of students mentioned T.V., radio, or movies. Placing these together represents a somewhat arbitrary classification in Table 5. Movies, for example, might well be categorized as "Unorganized Individual Activities". Thus, although slightly under 30% of the students are included in the activity labelled "Unorganized Gang Activites", this category might in reality be somewhat larger if movies were included.

Within the category "Unorganized Gang Activites", there are such activities as playing pool, going to the cafe for cokes, "goofing off", dating and visiting friends. A larger number of boys take part in

TABLE 5

STUDENT LEISURE ACTIVITIES

(N = 182)

Activity	f	% of N
Hobbies	95	52.2
Reading	109	59.9
Helping at Home	13	7.1
T.V. - Radio - Movies	95	52.2
Clubs	10	5.5
Sports Activities	80	44.0
Unorganized Gang Activities	54	29.7
Self-Education Activities	27	14.8
Unorganized Individual Activities	50	27.5
Family Activities	11	6.0
No Answer or Misunderstood Question	6	3.3

activities which are commonly classified as "gang activities".

Sports activities play an important role in the life of teen-agers. It is interesting to note, however, that in the area surveyed clubs or organized social activities were relatively unimportant. In their complaints about the community, several people lamented the shortage of clubs. Again, the number of self-education activities is relatively small, but those who are engaged in these are quite often engaged in more than one such activity.

In a group of rural students it may be expected that "Unorganized Individual Activities" would be quite common. These activities were usually reported as going on a walk, whether it be around the farm or through the bush in the surrounding areas. Other such activities included horseback riding and relaxing around the house. Family activities include playing with siblings and going on family outings. Some students mentioned such activities as going to the lake. These might be categorized as individual, gang, or even family activities, and in the absence of any further description, were categorized by dividing the responses approximately equally among the three groups. The responses are noticeably lacking the large blocks of time being used in the adolescent society activities which one might find in metropolitan areas. This reinforces our point of view that a sub-society does not exist to any great degree.

VII. CONCLUSIONS

The implications that these findings have for the teacher, the school and the educational program could best be ascertained by the teachers and principals themselves. Some questions which the data raise,

TABLE 6

SUMMARY OF STUDENT REACTION TO SCHOOL, COMMUNITY AND HOME

(N = 182)

	Favorable		Unfavorable	
	f	% of N	f	% of N
School				
Physical Aspect	206	113.2	96	52.7
Social Aspects	115	63.2	91	50.0
No Answer	7	3.8	12	6.6
Community				
Physical Aspects	74	40.7	111	61.0
Social Aspects	100	54.9	58	31.9
No Answer	15	8.2	26	14.3
Home				
Physical Aspects	54	29.7	45	24.7
Social Aspects	156	85.7	97	53.3
No Answer	15	8.2	48	26.4

however, may be stated and these provide the point of departure for discussions by school staff members:

1. If the rural schools are the last stronghold of youth who are strongly traditional and do not form an adolescent society within the community, should the teachers and administrators keep it this way? Is this preferred, inasmuch as we know most students are planning on leaving the farms and villages for "city life" just as soon as they can?

2. If the vast majority of students are heading for the cities and urban life, what further preparation can the schools provide in the educational program to make this transition easier for the student?

3. Students complain about too much school work and too much homework. Is this legitimate and should the schools accommodate the students better?

4. Are the students viewing their teachers, their teaching methods, and the instructional program realistically? If so, what can teachers do about students' unfavorable comments? (See Table 6)

5. Can the schools, and should the schools, do more to compensate for the lack of organized activities in these communities?

6. To what extent do these factors affect the climate for learning? Could these learning conditions be so enhanced that significant improvements in the students' learning would occur?

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APPENDIX

SUMMARY OF FINDINGS FROM PUPIL SURVEYS

Ethnic Factors:

1. instruction time in non-English - size of cells too small to permit acceptance or rejection of hypothesis. Corrected X^2 indicates acceptance of hypotheses - i.e., achievement level and instruction time are independent.

2. birthplace of paternal grandfather - N.S.

3. generation (Can.) of father / generation of mother - N.S.

4. father's birthplace - N.S.

5. birthplace of maternal grandfather - N.S.

6. household ethnicity - N.S.

7. non-English language used by husband to wife

   .significant association at .05 level

   .partitioning showed proportion of students from English and English-Ukrainian speaking homes who received high and medium marks is greater than the proportion of students from Ukrainian-speaking homes in this achievement category

	Hi	Med	Lo
Eng	30	32	22
Eng-Ukr	14	8	9
Ukr	8	14	22

   $p < .01$

   .no significant association between language and achievement when comparing English and English-Ukrainian students along.

8. language used by father to children - N.S.

9. language used by mother to children - N.S.

10. kind of English heard most in community (business, farmer, worker) (no information on how evaluated) - N.S. but appr. $p < .05$

    .partition df showed only significant association (at $p < .025$) between type of English heard and achievement level was in comparing business with farmer in high and medium achievement levels. Business language associated with high achievement for this sub-group.

11. "teen-age language"- (of those in school compared to those not in school) - N.S.

Use of Leisure Time

1. types of activities - N.S.

Non-Standard English

1. Home language - public or formal (estimated by interviewers)

   - overall X^2 - N.S.

   - test for trend showed significant association ($p < .05$) between higher achievement and formal language within the achievement category in question.

2. Parents' view of community's English

   - significant at $p < .05$ level

   - high achievement associated with viewing community language as "teacher-business". Interestingly few of this group were at medium achievement level.

3. Kind of English heard in the home (combined categories)

   - significant at $p < .025$ level.

   - high achievement associated with "teacher-business" English in the home. Test for trend confirmed this association at the $p < .01$ level.

   - little association at medium achievement level

4. Home language, formal-public (as perceived by parents)

   - significant at $p < .05$ level

- formal language associated with high achievement, public language with low achievement. Little association for medium achievers.

Family Composition

1. Highest grade completed by father

   - overall X^2 significant at $p < .05$. Higher father education associated with higher student achievement.

   - partitioning suggests that significant association ($p < .025$) found only when comparing the group whose fathers had completed some high school (10+) with all others (fathers completed -6 + fathers completed 7 - 9). Higher proportion of the former group placed at high and medium achievement levels than did the "non-high school" group.

   - again, little association found for the medium achiever.

   - testing for trend found significant association ($p < .01$). Higher student achievement associated with greater education of father for the achievement group being considered.

2. Highest grade completed by mother

   - overall X^2 significant at $p < .001$ level. Higher mother education associated with higher student achievement.

   - partitioning showed significant associations found when comparing low and medium achievers with high achievers, i. e. little association found when studying the low and medium subgroup alone. Greater proportion of students with "high school" mothers received high marks $p < .01$ than students with "non-high school"mothers; greater $p < .025$ proportion of "junior high school mothers" (grades 7-9) than "elementary mothers" were at high achievement level.

     (not the same high school - non high school breakdown as found when studying influence of father's education).

3. Average school grade completed by older siblings

   - overall chi square significant at $p < .001$ level

   - partitioning showed generally that key split re association with high marks is at Grade XII - non Grade XII point; for association with low marks break was at some high school (XII + XI + X) vs no high school point.

$p < .025$ (a) greater proportion of students whose siblings reached grades 7-9 than proportion of students whose siblings reached grades 10-11 received low marks.

$p < .001$ (b) greater proportion of siblings reached grades 7-9 than proportion of students whose siblings reached high school (grades 10 + 11 + 12) received low marks.

$p < .001$ (c) greater proportion of students whose siblings reached grade 12 received high marks than did students whose siblings completed 7-9 or 10-11.

4. Total number of children in family

- overall X^2 significant at $p < .05$ level - small families association with high achievement.
- trend significant at $p < .001$ - significant association between higher achievement and smaller families for each achievement level under consideration. (linear relationship)
- partitioning showed

$p < .01$ (a) proportionately more students from medium sized families (3-4) were high achievers than were students from large families (5+)

$p < .025$ (b) in comparing high and medium achieving students, proportionately more students from small (1-2) and medium (3-4) sized families were high achievers than were students from large-sized (5+) families.

$p < .01$ (c) greater proportion of students from large families (5+) were low achievers than were students from medium and small families. i.e., important break in terms of these associations was between large families (5+) on one hand, and medium and small on the other.

Orientation of family toward home, school and community

1. Most appealing about school: (student's responses)

- significant association at $p < .001$ level
- association between

LO achievement and responding - "new and more things to learn"
- "to get an education"
- no response

MED achievement and responding - "choice of subjects"

HI achievement and responding - "good teachers"
- "get together with friends"

2. Least appealing about school - N.S.

3. Most appealing about community (too many cells N<) probably - N.S.

4. Least appealing about community - N.S.

5. Most appealing about home - N.S.

6. Least appealing about home - N.S.

Family Occupational Mobility/ Parental and Student Occupational Aspirations

1. Parents' occupational aspirations for sons (Card 2 scale)

$p < .01$. significant at $p < .025$ level - high aspiration level associated with high achievement by student partitioning; greater proportion of students whose parents had very low aspirations were low achievers than were students whose parents had high, medium and low aspirations.

. no significant association found when students with high and medium aspiring parents were compared to students with low aspiring parents.

2. Relationship between parents' and students' aspirations

. significant association at $p < .001$ level.

. association between low achieving and parents' aspiring higher than student; between high achieving and parents' aspiring the same as or lower than student.

. little association for medium achievers.

3. Student's occupational aspiration scores (Rosen scale)

BOYS . significant at $p < .02$ level

. association between high/medium achievement and high aspirations between low achievement and low aspirations.

GIRLS . N.S.!

4. Boys' aspiration to white/blue collar occupation

. significant at $p < .001$ level.

. association between high achievement and white-collar aspiration; between low achiever and blue-collar aspiration - little association for medium achieving group.

Level of Living

1. Standard of living - Edward's Scale - significant at $p < .001$ level

   - low achieving associated with low standard; high achieving with high standard.

   - partitioning indicated that:

     - more "high standards" than "medium standards" are high achievers - little association between being in either high or medium standard group and low achievement.

     - more low standards than medium-high standards are low achievers.

2. Standard of living - Wilmott Scale

   - significant association at $p < .025$ level

   - trend association at $p < .001$ level, linear relationship

3. Crowding - Edward's Scale

   - significant association at $p < .001$ level

   - students from homes with less than one person per room tended to be high achievers.

   - proportionately more students from crowded homes (1.1+ persons per room) were at low achievement level.

   - little association between medium crowding index homes (1.0 persons per room) and achievement.

Value Orientations (Rosen-French Value Orientation Test)

1. Active-passive of parents - significant at $p < .001$

   - active orientation associated with high achievers, passive orientation with low achievers

2. Individual-collective of parents

   - too many small cells

   - probably high individual associated with high achievement
     medium independent + high collective associated with low achievement.

3. Future-present of parents

   - too many small cells

   - Probably N.S.

4. Parents' perception of active-passive of youth
    - significant at $p < .001$ level
    - "active" association with high achievement
      "passive" association with medium and low achievement
5. Parents' perception of individual-collective of youth - N.S.
6. Parents' perception of future-present of youth
    - significant at $p < .001$ level.
    - "high future" associated with high and medium achievement.
    - "medium future" + "high present" associated with low achievement.
7. Active-passive of youth (female)
    - significant at $p < .01$ level
    - "active" associated with high achievement
      "passive" with low achievement
8. Active-passive of youth (male)
    - significant at $p < .025$ level
    - "active" associated with high achievement.
      "passive" associated with low achievement
9. Individual - collective of youth (female)
    - significant at $p < .01$ level
    - "high individual" associated with high achievement
      "medium individual" + "high collective" associated with low achievement
10. Individual - collective of youth (male)
    - significant at $p < .05$ level
    - "high individual" associated with high achievement
      "high collective" associated with low achievement
11. Future-present of youth (female) - N.S.
12. Future-present of youth (male)
    - significant at $p < .01$ level

- "medium future" associated with high achievement
  "high future" associated with medium achievement
  "high present" associated with low achievement

partitioning

- tendency for proportionately more "medium future" than "high future" to be high achieving as compared to medium achieving is not significant.

- significantly greater proportion of "high presents" than "high and medium futures" were low achievers.

13. Parents' value orientation (total)

    - too many small cells, tendency for "high scores" to be associated with high achievement "medium and low scores" to be associated with low achievement.

14. Parents' perception of youth value orientation (total)

    - too many small cells, same trend as above.

15. Youth value orientation (total)

    - significant at $p < .001$ level

    - high score associated with high achievement, medium and low scores with low achievement.

Ecological Factors[1]

1. Frequency of household contact with Edmonton - N.S.
   but trend showed significant association ($p < .05$) between high achievement and proximity to Edmonton.

2. Time required to travel to Edmonton - N.S.

3. Distance from Edmonton - N.S.

4. Parents' geographical voluntary association
   too many cells $n < 5$, probably - N.S.

5. Kind of premise/ organization used by parents in voluntary association - N.S. but approaching $p < .05$

   - association between low achievement and use of local P.O. or store
     high achievement and use of more than one premise

6. Youth geographical voluntary association

   - small n's but probably - N.S.

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[1] The data for items 5, 6, 7, 8 and 9 should be recoded and analyzed again and these findings must therefore be considered highly tentative.

7. Kinds of premises/organization used the most by youth

- significant at $p < .05$ level
- association between LOW achievers and much use of organization/homes and churches

HIGH achievers and "more than one premise"

8. Parent-Youth geographic congruency - N.S.

9. Parent-Youth kinds of premise/organization congruency - N.S.

Ecology

1. length of time at present location - N.S.

Motivational Factors

1. McLelland's scale and grade IX achievement

Total sample	- no significant association - no significant trend
Males	- no significant association - no significant trend
Females	- no significant association - no significant trend

2. Edwards' achievement and Grade IX achievement

Total sample	- association significant at $p < .0025$ - high scores on Edwards associated with high performance in grade IX.
Males	- association significant at $p < .025$ - high Edwards score associated with high performance in Grade IX - trend significant at $p < .005$
Females	- association significant at $p < .05$ - high Edwards score associated with high performance in grade IX - trend significant at $p < .005$

3. Edwards' affiliation and grade IX achievement

Total sample	- association (overall chi square) N.S. but trend significant at $p < .025$ - low Edwards score associated with high performance in Grade IX
Males	- association - N.S. - trend - N.S.
Females	- association - N.S. - trend - N.S.